# KENTUCKY FORESTS

*Northern Cumberland Unit*

# FOREWORD

More than a decade has elapsed since the last comprehensive inventory of Kentucky's woodlands. Timber cutting, tree growth, and shifts in land use since then have led to several important changes in the timber resource. The demand for forest products has also changed. Recent emphasis on rural area development has made the necessity for fresh statistics even more pressing. Local communities and forest-based industries are finding a greater need for up-to-date data as they plan for future economic development. So, there is an urgent need for new information.

To meet these needs, the Division of Forestry of the Kentucky Department of Natural Resources and the U. S. Forest Service planned and conducted a new inventory of Kentucky forests. The field work was completed in 1964.

The McSweeney-McNary Forest Research Act of 1928 authorizes the Forest Service to complete a statewide forest inventory of Kentucky at approximate 10-year intervals. This is part of the nationwide program of maintaining a current account of our timber resources. The State of Kentucky appropriated $120,000 for the current survey. This contribution, supplementing the Federal funds available for a regular survey, made it possible to intensify the inventory. As a result, we can provide the kind of detailed information needed for making long-range plans to meet future demands and in addition help local communities and forest-based industries make more efficient use of the forest resource.

Clarence D. Chase, Leader of the Survey Project at the Lake States Forest Experiment Station, directed the inventory. Field survey units of the Kentucky Division of Forestry and the Lake States Station collected the basic inventory data. The Lake States Station computed and tabulated the final statistics and the Central States Forest Experiment Station analyzed and reported the results.

Other organizations made important contributions to the new inventory. Personnel of the Eastern Region of the U.S. Forest Service inventoried and provided statistics for the Cumberland National Forest. The Northeastern Forest Experiment Station assisted with the computation of National Forest data. The Tennessee Valley Authority provided men and equipment to assist in surveying areas of their interest. The Soil Conservation Service and the Agricultural Stabilization and Conservation Service provided the field crews with office space and up-to-date aerial photographs. The Kentucky Department of Highways took and provided aerial photographs for parts of eastern Kentucky where no recent photographs were available. The University of Kentucky and Kentucky Department of Commerce took an active part in planning and gave valuable assistance with problems that evolved during the course of the inventory. Our thanks go to all these organizations and others who contributed.

For sampling and reporting purposes, the State was divided into seven survey units (frontispiece). This report covers the Northern Cumberland Unit. Additional information regarding the survey can be obtained from either the Division of Forestry, Kentucky Department of Natural Resources or the Central States Forest Experiment Station.

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# KENTUCKY FORESTS

## *Northern Cumberland Unit*

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Division of Forestry, Kentucky Department of Natural Resources

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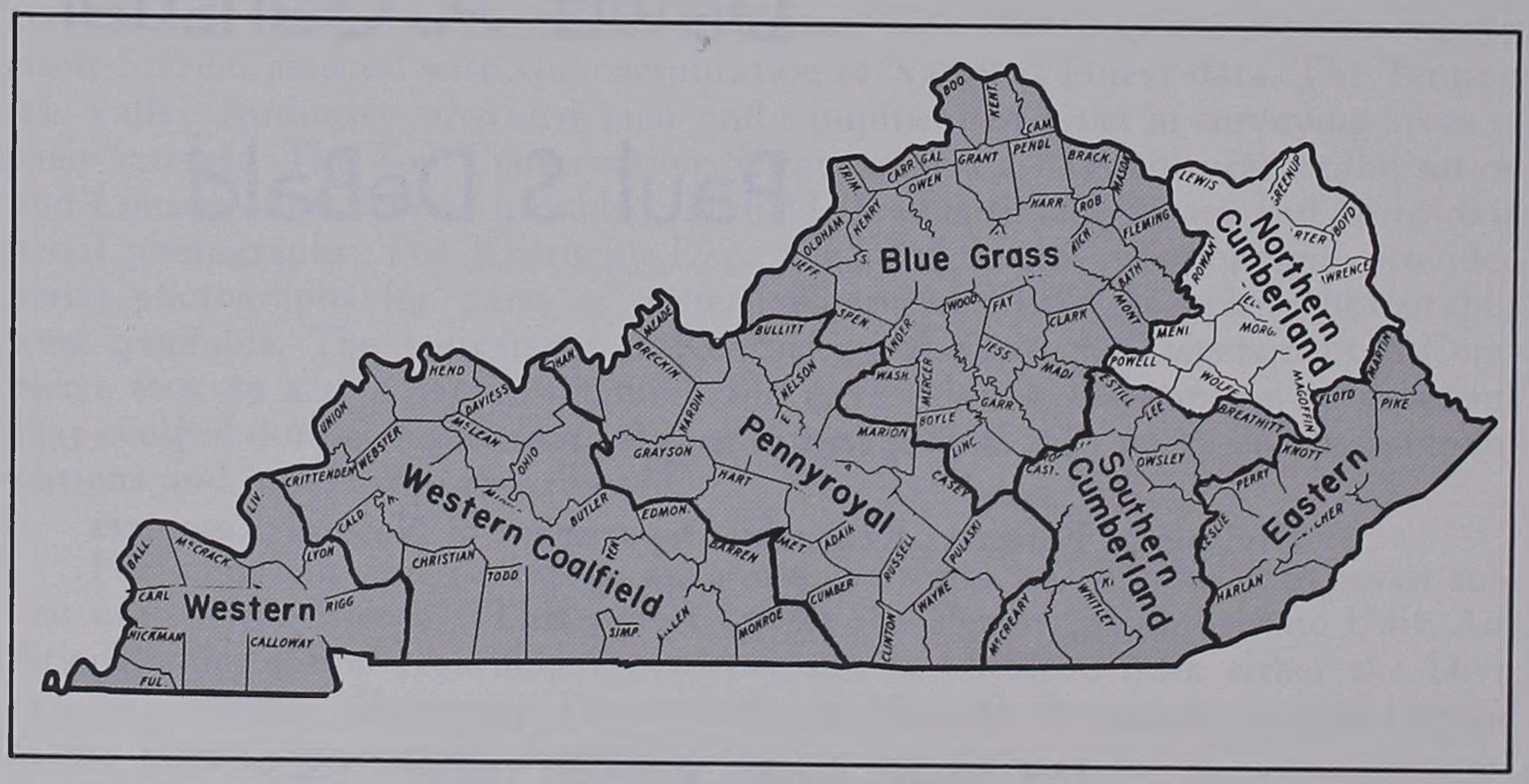


*Location of the Northern Cumberland Unit in Kentucky.*

# THE TIMBER RESOURCE HAS CHANGED

The Northern Cumberland Unit includes 13 counties in the northeastern corner of Kentucky. This rural area of steep slopes and narrow valleys is poorly suited to agriculture and other nonforest land use. Forests occupy almost 1.9 million acres or approximately three-fourths of the land area. Less than 1 percent of the forest has been classified noncommercial, i.e., sites too poor for timber production and areas, such as state parks, that have been reserved from cutting.

Commercial forest area has increased 110,000 acres, about 6 percent, since 1949. Much of the gain was due to a decline in farming. Submarginal fields and pastures, abandoned during the fourteen years between forest inventories, have become restocked with tree cover. Most of this new forest is in an early stage of development and has little or no merchantable timber volume.

Increases in forest area were practically regionwide with gains occurring in 9 of the 13 counties (fig. 1). The largest gains took place in three of the Unit's most heavily forested counties—Lawrence, Johnson, and Magoffin. The Region's woodland is well distributed. Only Boyd County, which contains the City of Ashland, is less than 70 percent forested. Lewis has more forest land than any other county (226,000 acres) but Magoffin is the most heavily forested county (83 percent of the land area).

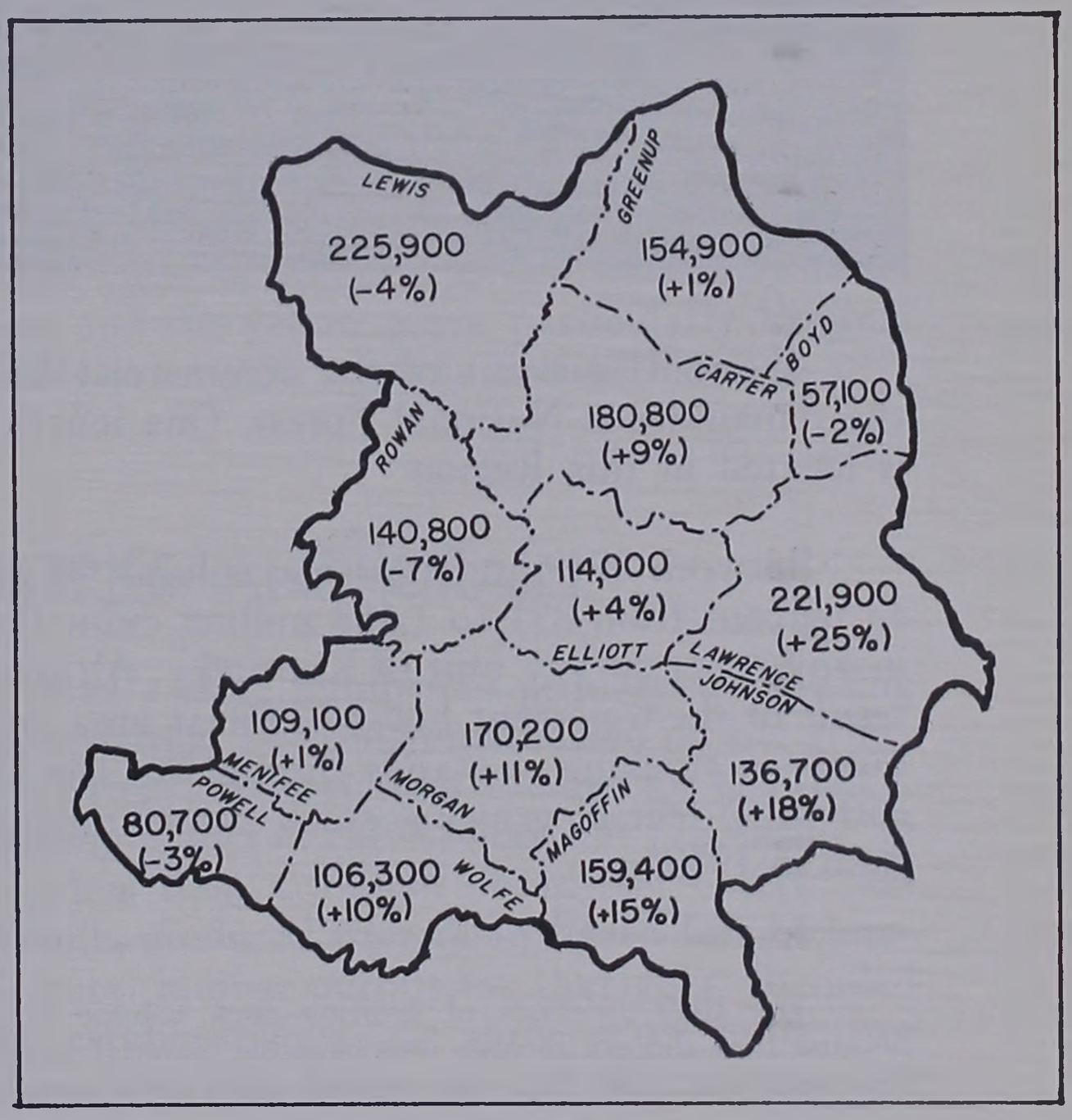


*FIGURE 1.—Acreage of commercial forest land by county, 1963, and percentage change since 1949.*

Pine occurs more frequently in the Northern Cumberland than in most other parts of the State and more than one-fourth of Kentucky's pine and oak-pine forests are found here (fig. 2). But stands of hardwood predominate. Almost four-fifths of the commercial forest is classified as oak-hickory or central mixed hardwood.

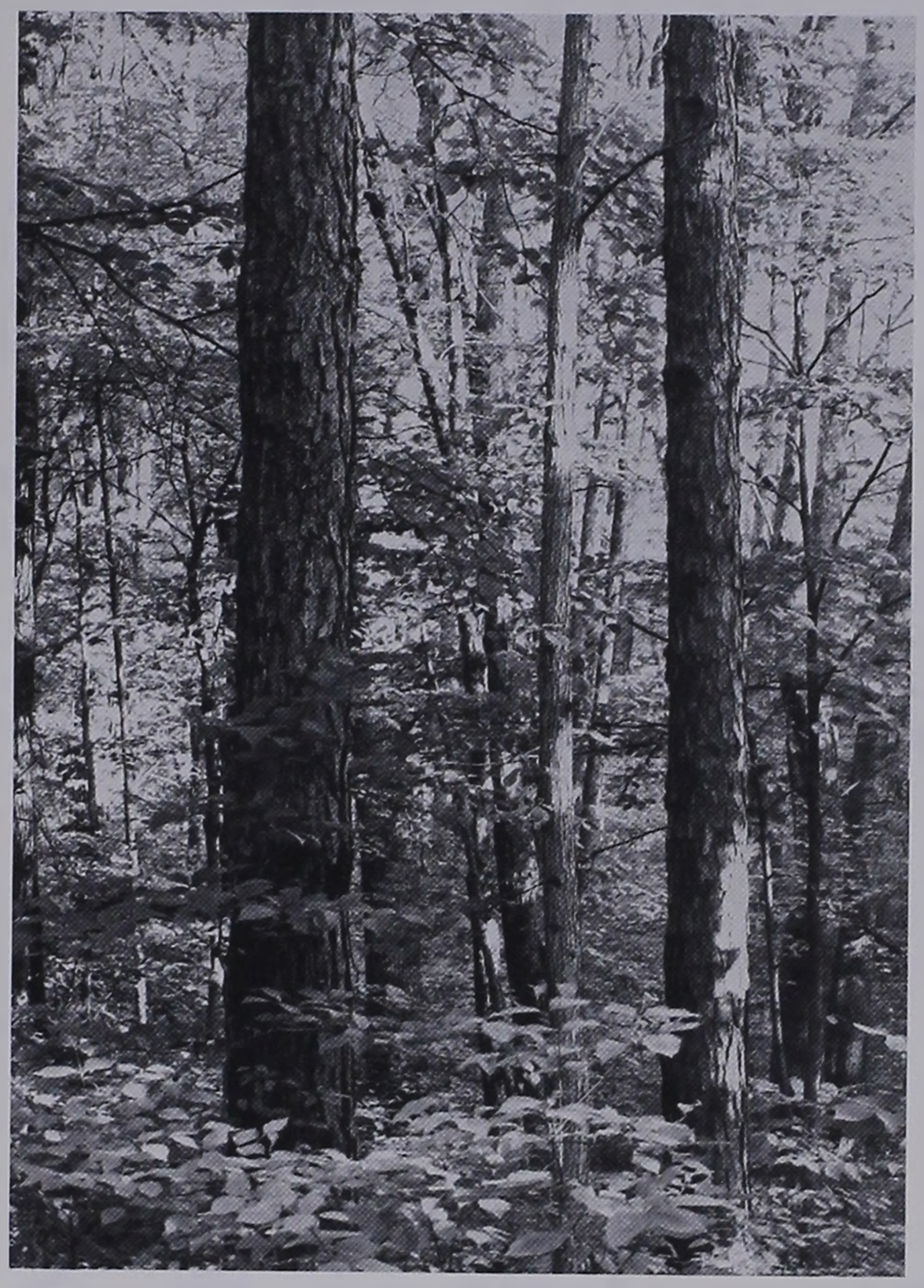

*FIGURE 2.—There are a quarter million acres of pine and oak-pine forest in the Region.*

About 94 percent of the commercial forest is privately owned and most of the remainder is National Forest. One-fourth of the Cumberland National Forest is located in this Region.

Between 1949 and 1963 the volume of growing stock in the Region increased 33 percent from 891 to 1,188 million cubic feet.[1] This volume gain was larger than in any other survey unit of Kentucky. Although a small part of the increase was a result of the 6 percent boost in forest area, most of it was due to general improvements in stocking in stands throughout the Unit. The present regional average of 640 cubic feet of growing stock per commercial forest acre is 130 cubic feet higher than in 1949.

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[1] The 1949 estimates of growing-stock volume were not directly comparable with those of 1963 because they did not include merchantable material in the upper-stem portion of hardwood sawtimber-size trees. The 1949 data were revised to permit comparisons.

Increases in volume were recorded for all sizes of timber but the most impressive gains took place on trees in the 12-inch to 18-inch d.b.h. classes (fig. 3). This is good news for most local wood-using industries because these trees, which are beginning to develop quality growth, represent their timber supply for the immediate future. Sawtimber volume enlarged almost 50 percent to 3,935 million board feet. This amounted to an average yearly increase of more than 40 board feet per acre.

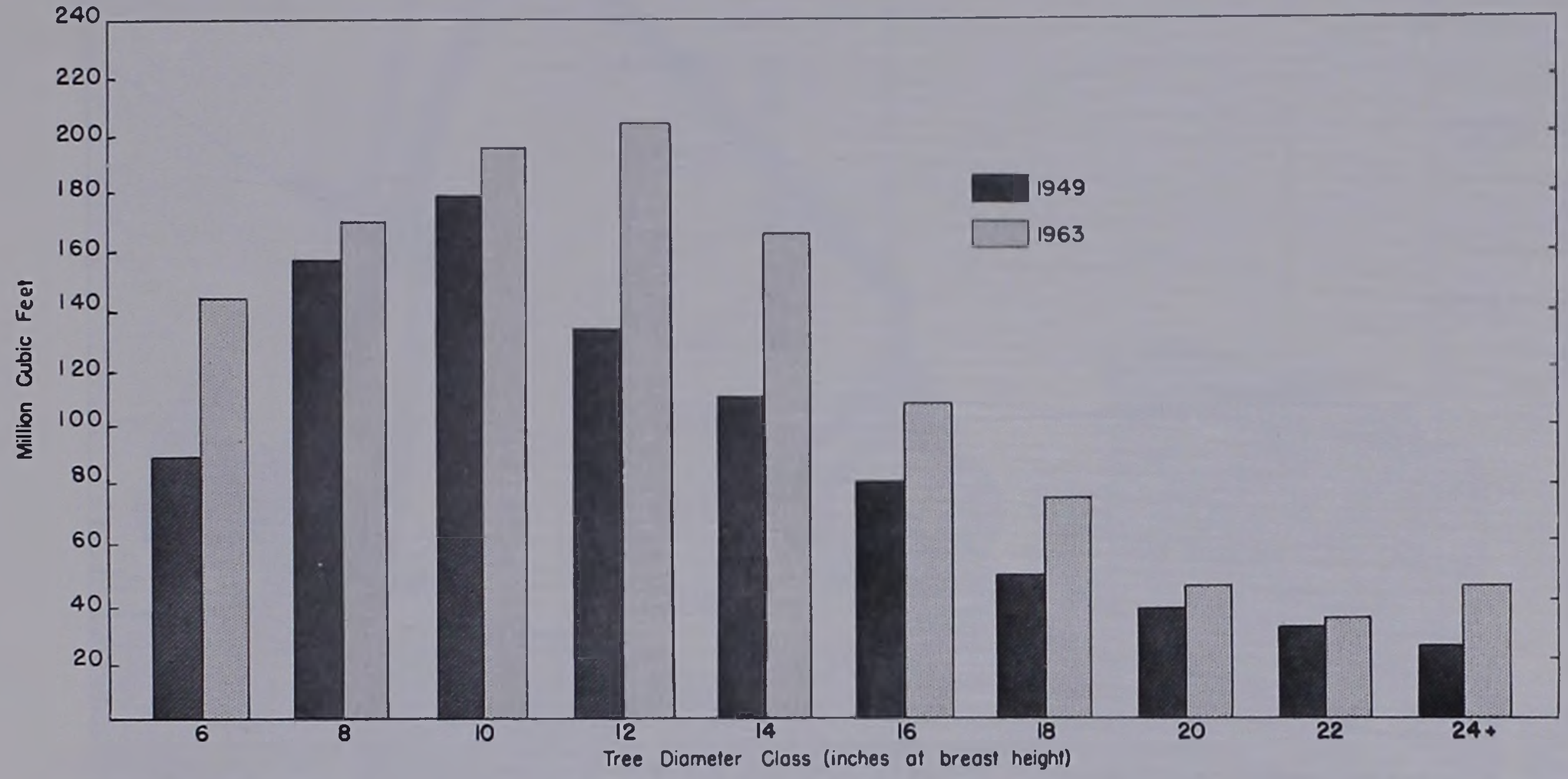



*FIGURE 3.—Change in volume of growing stock by diameter class, 1949-1963.*

Volume is up for most of the important timber species in the Region. Increases in oak volume were very sharp and these species now account for about three-fifths of the merchantable volume (figs. 4 and 5). There were also noteworthy volume gains for yellow-poplar and the yellow pines, particularly Virginia pine. The volume of yellow-poplar sawtimber now exceeds that of hickory.

## TIMBER INDUSTRIES AND DRAIN

The Northern Cumberland Unit has a large number of primary wood-using firms considering the size of its timber resource. Yet the annual drain on the growing stock, about 1.3 percent of the inventory, is lower than average for Kentucky. At present, there are about 90 wood-using plants in the Region, but practically all of them are small sawmills consuming less than a million board feet of saw logs annually. In 1962, the Region's sawmills produced 64 million board feet of lumber, about 14 percent of Kentucky's total lumber output for that year. Included among the other primary wood-using establishments are three stave mills, two charcoal plants, and a creosote treating plant (fig. 6).

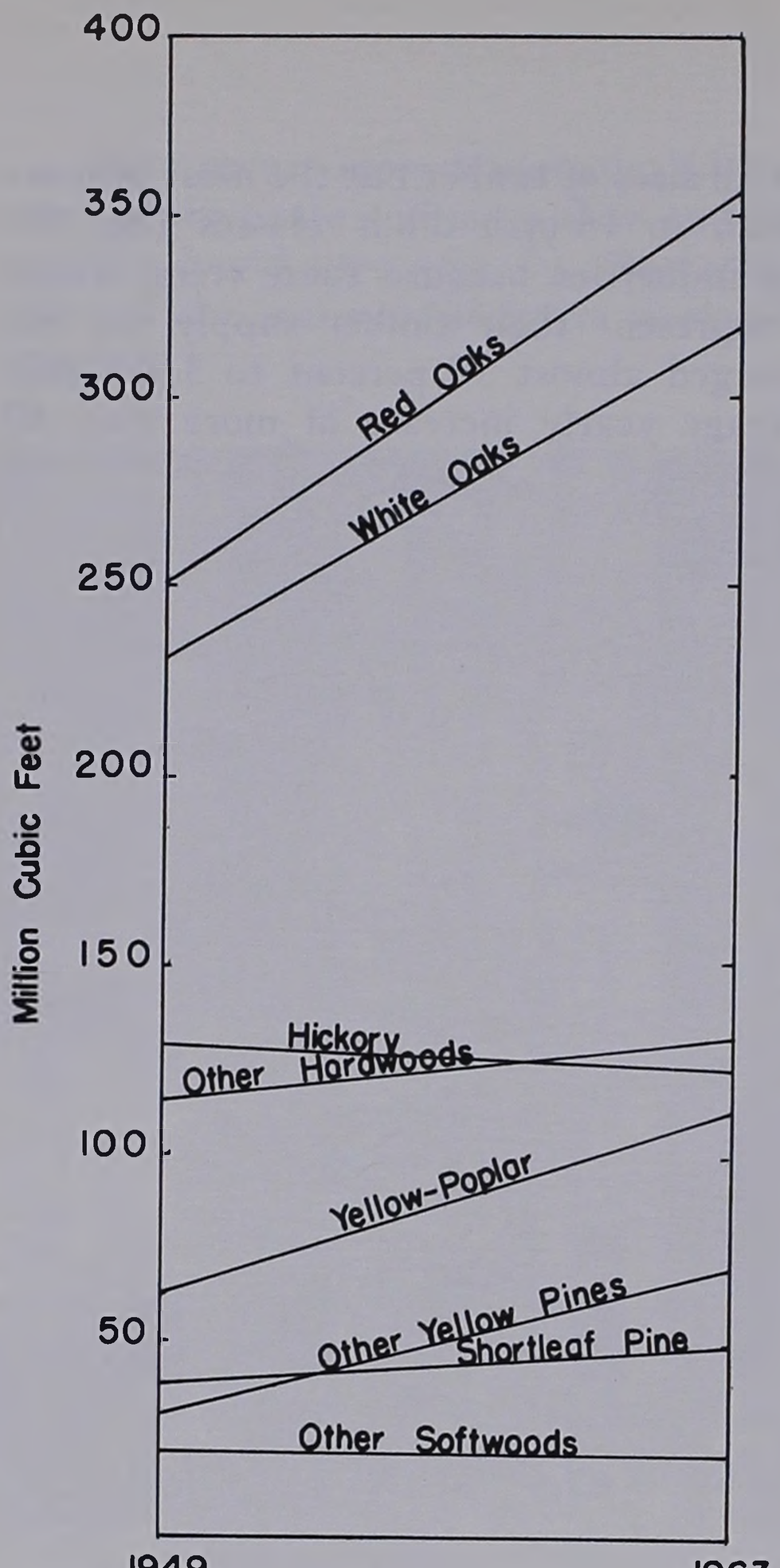



*FIGURE 4.—Change in growing-stock volume by species groups, 1949-1963.*

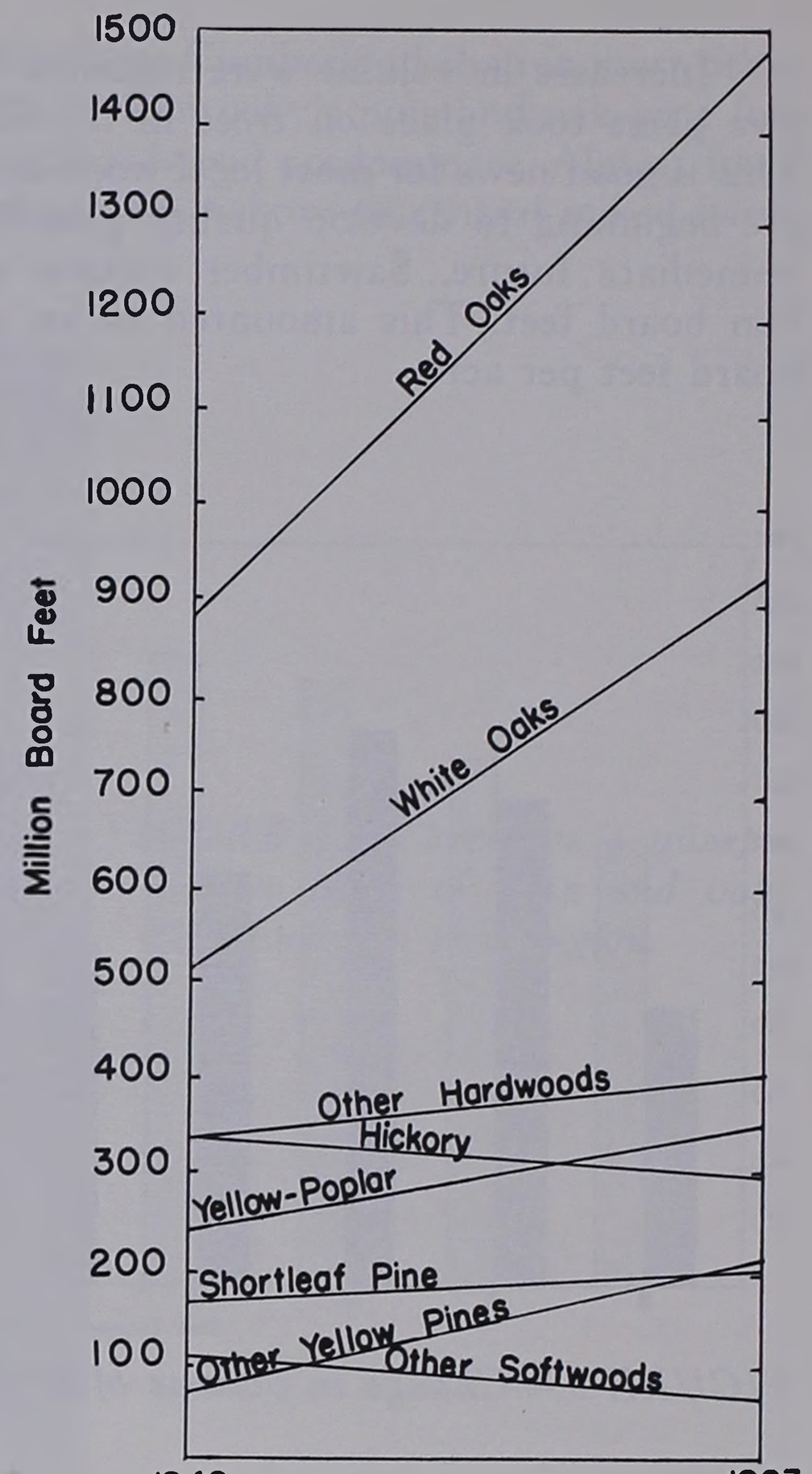



*FIGURE 5.—Change in sawtimber volume by species groups, 1949-1963.*

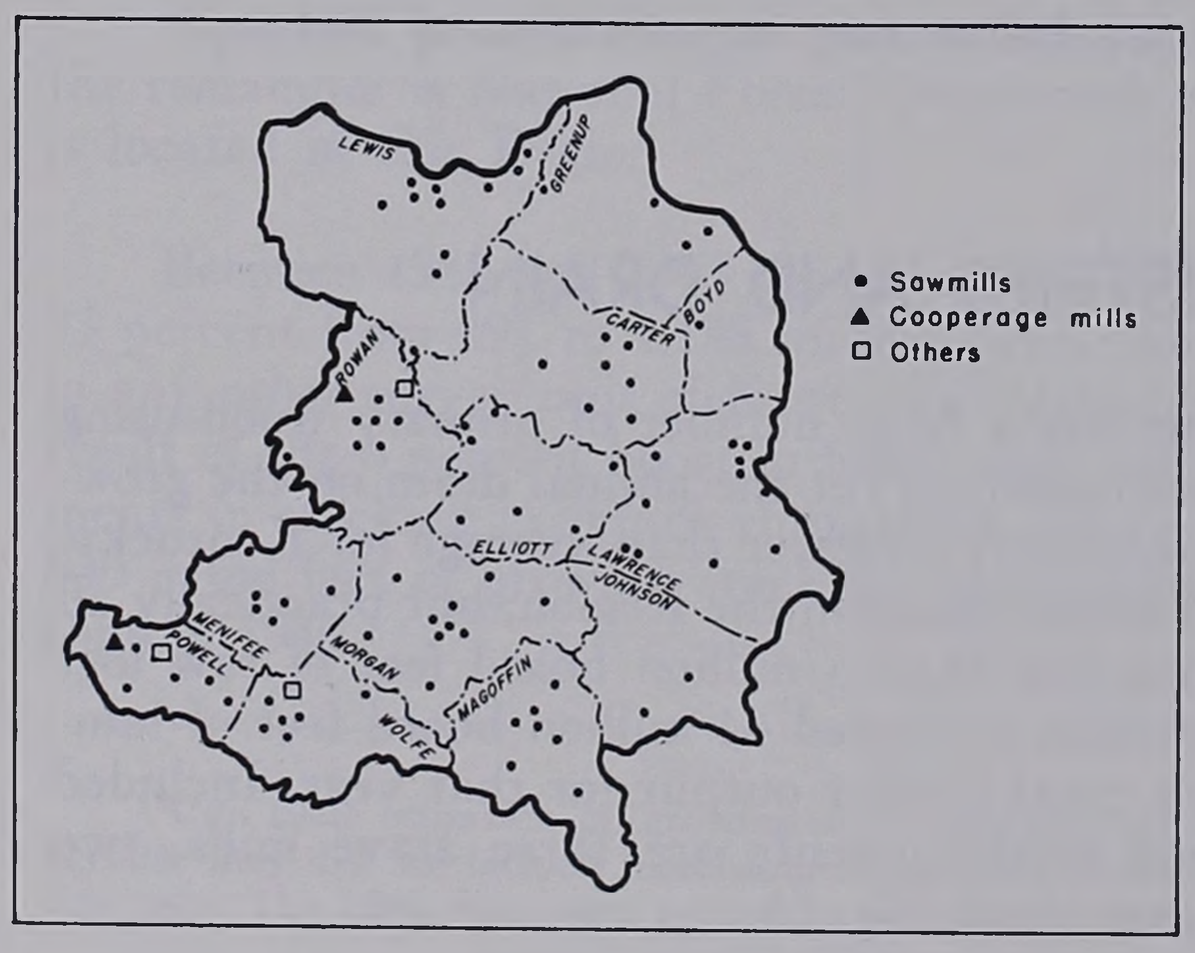



*FIGURE 6.—Location of primary wood-using industries, 1963.*

A large amount of pulpwood is cut from the Region each year. In 1962, the cut amounted to 50,000 cords of roundwood, most of it hardwood. This was about two-thirds of the total pulpwood harvest from Kentucky during the year (fig. 7). There are no wood-using pulpmills in Kentucky, so all of the pulpwood harvest was shipped to mills in adjacent states.

*FIGURE 7.—Each year, a large volume of pulpwood is harvested from the Northern Cumberland Unit.*

The total cut of growing stock in the Region during 1962 amounted to almost 16 million cubic feet, about 13 percent of the total harvest from Kentucky. Most of the cut was from trees of sawtimber size. More than 80 million board feet of saw log material were harvested, with oaks accounting for 43 percent of this total. Another 27 percent of the sawtimber cut was yellow-poplar. Basswood, beech, shortleaf pine, and hickory ranked next in order of importance. The 22 million board feet of yellow-poplar sawtimber cut from the Region in 1962 was more than one-fourth of the total yellow-poplar harvest in Kentucky. One-fifth of the pole-timber volume harvested was shortleaf pine, most of which went for pulpwood and fenceposts.

# THE CURRENT BALANCE BETWEEN GROWTH AND CUT

The Region's inventory volume is growing at a rate of 64 million cubic feet per year or 5.4 percent before allowances are made for cutting. Sawtimber volume is growing at an annual rate of 296 million board feet or 7.5 percent per year. On a per-acre basis, these growth rates average 34 cubic feet of growing stock and 159 board feet of sawtimber per year.

Although average volume growth per forest acre is higher than in most other parts of the State, it still is well below the capacity of this Region's forests. Increases in productivity are limited by poor stocking. Only 44 percent of the commercial forest is well stocked with merchantable or potentially merchantable growing-stock trees. And only 11 percent of the forest is in a highly productive condition; i.e., well stocked with desirable growing-stock trees or expected to attain such stocking in the near future. Large increases in productivity cannot be expected until stocking improves.

While volume growth is lower than it might be, it still exceeds the cut (fig. 8). About two-thirds of the current growth occurs on trees of poletimber size while four-fifths of the cut is from sawtimber trees. But growth exceeds cut for both kinds of timber. A comparison of current growth with the 1962 cut indicates that all growing stock is increasing more than 4 percent and sawtimber volume more than 5 percent annually.

With the exceptions of select red oak and basswood, all of the heavily used timber species—the other red oaks, white oak, yellow-poplar, beech, pine, etc.—are growing at a faster rate than they are being cut.

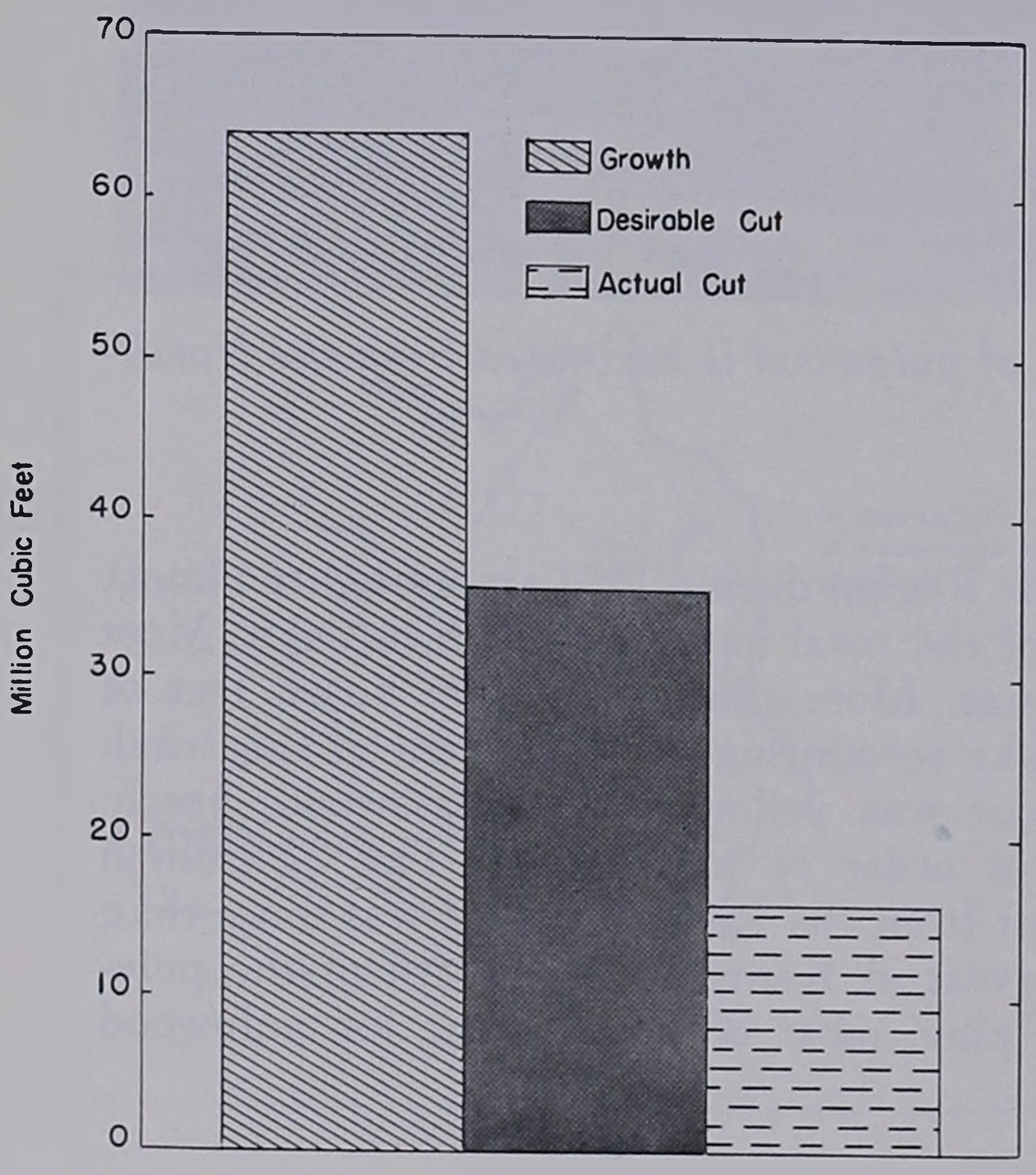



*FIGURE 8.—Growth, desirable cut and actual cut of growing stock, 1963.*

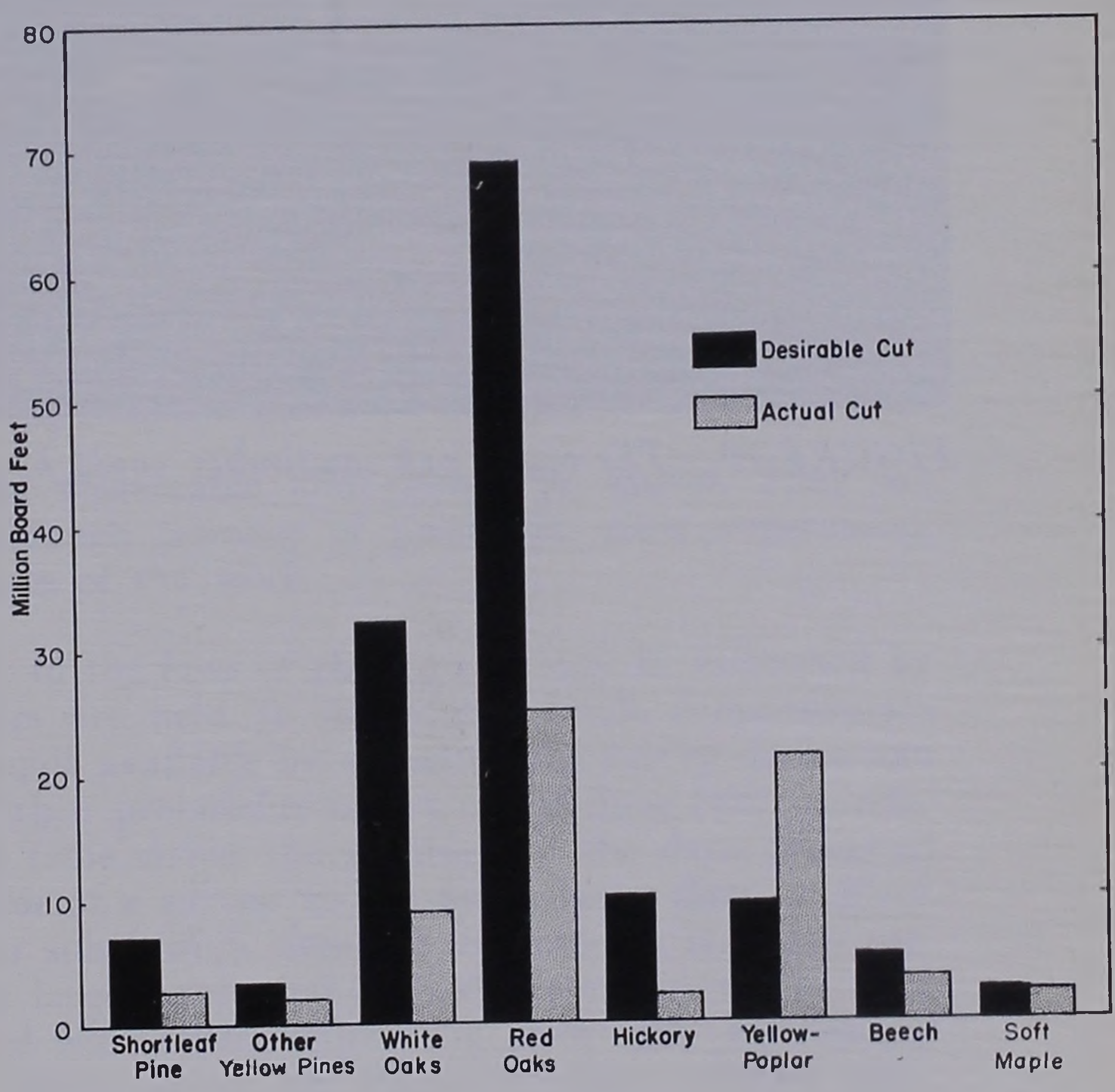
# MORE TIMBER CAN BE HARVESTED

A desirable cut of more than 35 million cubic feet of growing stock, including 147 million board feet of sawtimber, has been estimated for the Northern Cumberland Unit. This is the volume that should be removed annually in harvest cuts and commercial thinnings. The aim of the desirable cut is to improve timber productivity with the long-range goal of establishing a regulated forest producing a sustained yield of wood for the manufacture of consumer goods. The desirable cut provides a useful silvicultural standard with which to compare the actual cut to find where shortages and surpluses occur in the timber supply.

In the Northern Cumberland Unit the desirable cut of growing stock exceeds the current actual cut (that made in 1962) by about 20 million cubic feet (fig. 8). The annual cut of growing stock could be doubled and still not exceed the cut recommended. However, the excess of desirable cut over actual cut is not the same for all sizes and species of timber. The ratio of desirable cut to actual cut for poletimber volume is about 3 to 1, indicating that if markets were available, three times as much poletimber could be harvested each year. The desirable cut of sawtimber volume also exceeds the actual cut, but by a lesser ratio of 1.8 to 1.

Actual cut exceeds desirable cut for a few important timber species such as the select red oaks, yellow-poplar, basswood, and black walnut. Deficits are generally greater in the large diameter classes where high quality is concentrated. But most other species can sustain additional cutting (fig. 9). An additional 67

*FIGURE 9. — Desirable cut and actual cut of sawtimber for selected species, 1963.*



million board feet of oak sawtimber could be harvested annually (fig. 10). This surplus which is twice the present cut of oak sawtimber would be sufficient to support several new firms. Large amounts of yellow pine, hickory, and beech sawtimber are also available for cutting.

*FIGURE 10.—The cut of oak sawtimber could be greatly expanded.*

# APPENDIX

## Forest Survey Procedure

The resource statistics presented in this report were obtained from two sources: a timber-management-plan forest inventory of the Cumberland National Forest and a survey of all other forest land. Both were sampling surveys designed to yield reliable statistics for large areas. Both combined aerial photo interpretation and field work to minimize costs. Both employed electronic, data-processing machines to reduce computing time and generate more usable statistics than could be done by hand methods.

To attain specific levels of statistical accuracy, triple sampling was used. A large number of points were first examined on aerial photographs to determine the proportions of forest and nonforest land. One-fourth of the forest points were stereoscopically classified as to forest type, stand size, stocking, and site. One-twelfth of these points were in turn examined on the ground. The ground classification provided a check on photo classification and a means of improving estimates of forest area.

At each forest ground-check point a plot was established. Trees were classified and measured as a basis for estimating timber volume, growth, mortality, and quality. Ownership was determined for each plot.

Timber-cut information was based on forest-industry production records for 1962, on stump counts at forest-inventory plots, cutting records from large owners, and utilization factors based on a logging-residue study.

## Accuracy of Survey Estimate

Estimates of forest area and timber volume are subject to two kinds of errors: (1) nonsampling errors caused by mistakes in judgment, recording of measurements, or in calculations, and (2) sampling errors inherent in statistical work.

Nonsampling errors are not measurable and cannot be shown. They are avoided as much as possible through training of personnel, close supervision, and careful checking of all phases of the work.

Sampling errors are subject to the laws of chance and may be estimated by statistical methods. These errors are held to acceptable levels commensurate with the values involved and funds available by adjusting the survey design and the intensity of the sample. With a probability of two out of three (that is, relatively good) the accompanying table shows the accuracy of the data presented in this report. The sampling error of a survey is less for a large class or block than for a smaller class or other subdivision. Some of the resource statistics presented in this report have such large errors that it would be unwise to use them alone—but if they are combined with other figures the error may be reduced enough to warrant their use. Weak figures are shown to allow various combinations of data.

*Guides for judging accuracy by size of area and by volume of growing stock and sawtimber*

| Commercial forest land | Standard error of sampling |
|---|---|
| Acres | Percent |
| 1,857,800 | 1.2 |
| 1,000,000 | 1.6 |
| 500,000 | 3.0 |
| 300,000 | 3.9 |
| 100,000 | 6.8 |
| 50,000 | 9.6 |
| 30,000 | 12.4 |
| 10,000 | 21.5 |
| 5,000 | 30.4 |
| 3,000 | 39.2 |

| Growing stock volumes | Standard error of sampling | Sawtimber volumes | Standard error of sampling |
|---|---|---|---|
| *Thousand cu. ft.* | *Percent* | *Thousand bd. ft.* | *Percent* |
| 1,188,130 | 2.5 | 3,934,710 | 4.6 |
| 1,000,000 | 2.7 | 1,000,000 | 9.1 |
| 500,000 | 3.9 | 500,000 | 12.9 |
| 300,000 | 5.0 | 300,000 | 16.6 |
| 100,000 | 8.7 | 100,000 | 28.8 |
| 50,000 | 12.3 | 50,000 | 40.8 |
| 30,000 | 15.9 | 30,000 | 52.7 |
| 10,000 | 27.5 | 10,000 | 91.2 |
| 5,000 | 38.9 | | |
| 3,000 | 50.2 | | |

The occurrence of a (—) in the statistical tables of this report indicates one of two things:

(1) No units were measured by the inventory.

(2) The quantity of data measured was insignificant and did not warrant reporting.

## Definition of Terms

*Land and Forest Area*

*Gross area.* — The entire area of land and water as determined by the Census Bureau.

*Land area.* — The area of dry land and land temporarily or partially covered by water such as marshes, swamps, and flood plains; streams, and sloughs less than ⅛ mile wide; and lakes, reservoirs, and ponds smaller than 40 acres.

*Forest land.* — Land at least 10 percent stocked by forest trees of any size, or formerly having such tree cover and not currently developed for nonforest use. Does not include urban or thickly settled residential and resort areas, city parks, orchards, farmsteads, improved roads, or land developed and maintained for nonforest use by fencing, seeding, and so forth. The minimum area for classification of forest land or classes of forest land was 1 acre. Roadside, streamside, and shelterbelt strips of timber having a crown width of at least 120 feet qualified as forest land. Unimproved roads and trails, streams, and clearings in forest land were included as forest if less than 120 feet wide.

*Commercial-forest land.* — Forest land that is producing or capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation.

*Noncommercial-forest land.* — Unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions; and productive, public-forest land withdrawn from commercial timber use through statute or administrative regulation.

*Ownership*

*National Forest.* — Federal land that has been designated by Executive order or statute as National Forest, including purchase units; and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones title III land.

*Other public.* — All publicly owned land other than National Forest.

*Forest industry.* — Land owned by companies or individuals operating wood-using plants.

*Farmer and miscellaneous private.* — All privately owned land except forest industry land.

*Forest Types*

*Forest type.* — A classification of forest land based upon species composition considering all live trees.

*Southern pine.* — Forests in which 50 percent or more of the stocking is shortleaf or other southern yellow pines, singly or in combination.

*Oak-pine.* — Forests in which 50 percent or more of the stocking is hardwoods (usually upland oaks) but in which southern pine makes up at least 25 percent of the stocking.

*White oak.* — Forests in which 50 percent or more of the stocking is white oak, except stands that classify as redcedar-hardwoods or oak-pine.

*Oak-hickory.* — Forests in which 50 percent or more of the stocking is upland oaks or hickories, singly or in combination, except stands that classify as oak-pine, redcedar-hardwoods, or white oak.

*Central mixed hardwoods.* — Forests in which 50 percent or more of the stocking is a combination of hardwood species, principally, yellow-poplar, maple, beech, basswood, black walnut, elm, and northern red oak, except stands that classify as redcedar-hardwoods, oak-pine, oak-hickory, maple-beech, or elm-ash-cottonwood.

*Maple-beech.* — Forests in which 50 percent or more of the stocking is maple or beech, singly or in combination, except stands that classify as redcedar-hardwoods or oak-pine.

*Elm-ash-cottonwood.* — Forests in which 50 percent or more of the stocking is elm, ash, or cottonwood, singly or in combination except stands that classify as redcedar-hardwoods or oak-pine.

*Stand-Size Classes*

*Stand-size class.* — A classification of forest land based on the predominant size of timber present—sawtimber, poletimber, or seedlings and saplings.

*Sawtimber stands.* — Stands at least 10 percent stocked with growing-stock trees, with half or more of this stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

*Poletimber stands.* — Stands at least 10 percent stocked with growing-stock trees, with half or more of this stocking in sawtimber and/or poletimber trees, and with poletimber stocking exceeding that of sawtimber.

*Seedling-sapling stands.* — Stands at least 10 percent stocked with growing-stock trees and with seedlings and/or saplings comprising more than half of this stocking.

*Nonstocked areas.* — Commercial-forest land less than 10 percent stocked with growing-stock trees.

*Stocking Classes*

*Stocking class.* — A classification of commercial-forest land based on the percent of area occupied by growing-stock trees. *Growing-stock trees* include all live trees except culls.

*Well stocked.* — Stands that are 70 percent or more stocked with growing-stock trees.

*Medium stocked.* — Stands that are 40 to 69 percent stocked with growing-stock trees.

*Poorly stocked.* — Stands that are from 10 to 39 percent stocked with growing-stock trees.

*Nonstocked.* — Areas of commercial-forest land not qualifying as sawtimber, poletimber, or seedling and sapling stands. These areas may contain some volume but less than 10 percent of the growing space is effectively utilized by growing stock.

*Area-Condition Classes*

A classification of commercial-forest land based upon stocking by desirable growing-stock trees and conditions affecting current and prospective timber growth. *Desirable growing-stock trees* are those that have no serious defects in quality limiting present or prospective use. They have relatively high vigor and contain no pathogens that may result in death or serious deterioration before rotation age. These are the trees that would be favored in silvicultural operations.

*Desirable.* — Areas 70 percent or more stocked with desirable trees.

*Moderate and favorable.* — Areas 40 to 70 percent stocked with desirable trees and with 30 percent or less of the area having other trees and/or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.

*Moderate and unfavorable.* — Areas 40 to 70 percent stocked with desirable trees and with more than 30 percent of the area having other trees and/or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.

*Poor but favorable.* — Areas less than 40 percent stocked with desirable trees and with 30 percent or less of the area having other trees and/or inhibiting vegetation or surface conditions that prevent occupancy by desirable trees.

*Poor and unfavorable.* — Areas less than 40 percent stocked with desirable trees and with more than 30 percent of the area having other trees and/or inhibiting vegetation or surface conditions that prevent occupancy by desirable species.

*Volume Classification*

*Growing-stock volume.* — Cubic-foot volume of sound wood in the bole of sawtimber and poletimber trees from the stump to a minimum 4-inch-top diameter outside bark or to the point where the central stem breaks into limbs.

*Sawtimber volume.* — Net volume of the saw-log portion of live sawtimber trees in board feet, International ¼-inch rule. The saw-log portion extends from stump to a minimum top diameter outside bark of 6 inches for softwoods and 8 inches for hardwoods or to the point where defects reduce saw-log quality below Standard Log Grade 3 or Tie-and-Timber Grade.

*Tree-Size Classes*

*Sawtimber trees.* — Live trees of commercial species containing at least an 8-foot saw log. Softwoods must be at least 9 inches and hardwoods at least 11 inches d.b.h. outside bark.

*Poletimber trees.* — Live trees of commercial species at least 5 inches d.b.h. but smaller than sawtimber size, and of good form and vigor.

*Saplings.* — Live trees of commercial species 1 to 5 inches d.b.h. and of good form and vigor.

*Seedlings.* — Live trees of commercial species less than 1 inch d.b.h. that are expected to survive.

*Growth*

*Net annual growth.* — The annual change in volume of sound wood in live sawtimber and poletimber trees and the total volume of trees entering these classes through ingrowth less volume losses resulting from natural causes.

*Growing-stock growth.* — Net annual growth of pole and sawtimber trees in cubic feet.

*Sawtimber growth.* — Net annual growth of sawtimber trees in board feet, International ¼-inch rule.

*Timber Cut*

*Timber cut from growing stock.* — The net cubic-foot volume of sound wood in live sawtimber and poletimber trees cut for forest products during a specified year, including both roundwood products and logging residues.

*Timber cut from sawtimber.* — The net board-foot volume of live sawtimber trees cut for forest products during a specified year, including both roundwood products and logging residues.

*Desirable cut (formerly called allowable cut).*—The net volume of live sawtimber and poletimber trees that can be cut annually during the next 10 years in commercial-logging operations while maintaining or increasing growing stock and while effecting a reasonably even distribution of age classes below the rotation age selected for each type. It includes harvest and improvement cuts yielding 3 cords or more per acre, and one-tenth of the entire net volume of stands 10 or more years beyond the rotation age. Desirable cut includes all timber of merchantable size that should be cut from commercial-forest land in order to salvage, rejuvenate, or improve the stands and increase the growth without regard to restraints of ownership, inaccessibility, or the profit motive. Some of this timber may not be available for sale, too hard to get at or too scattered, or of currently unwanted species or quality.

*Rotation ages for saw-log trees in extensively managed stands by forest-type and site-index classes*

(In years)

| Forest type | Site index (50-year height in feet)* | | | | | | |
|---|---|---|---|---|---|---|---|
| | 40 | 50 | 60 | 70 | 80 | 90 | 100+ |
| Southern pine | 120 | 110 | 90 | -- | -- | -- | -- |
| Redcedar-hardwoods | 120 | 110 | 90 | -- | -- | -- | -- |
| Oak-pine | 120 | 110 | 90 | -- | -- | -- | -- |
| White oak | 120 | 110 | 90 | 80 | 75 | 70 | -- |
| Oak-hickory | 120 | 110 | 90 | 80 | 75 | 70 | -- |
| Central mixed hardwoods | -- | 110 | 90 | 80 | 75 | 70 | 60 |
| Maple-beech | -- | 100 | 100 | 100 | 100 | -- | -- |
| Oak-gum-cypress | -- | -- | -- | 80 | 75 | 70 | 60 |
| Elm-ash-cottonwood** | -- | -- | -- | 80 | 70 | 60 | 60 |

*Except in the case of cottonwood for which it is total height at 25 years.
**The rotation for cottonwood is half of the age shown.

## *Miscellaneous Definitions*

*Site class.*—A classification of commercial-forest land based on potential yields in cubic feet per acre of mean annual growth at culmination of increment in fully stocked stands of desirable trees.

*D.b.h. (Diameter at breast height).*—Tree diameter in inches measured outside the bark at a point 4½ feet above the ground.

*Diameter class.* — Where data are presented in 2-inch diameter classes, they include diameters from 1.0 inches below to 0.9 inches above the stated midpoint; e.g., trees 5.0 inches to and including 6.9 inches, are included in the 6-inch class.

# Principal Commercial Tree Species of Kentucky[2]

## Softwood Species

Cypress (baldcypress) ..... *Taxodium distichum* (L.) Rich.
Hemlock (eastern) ..... *Tsuga canadensis* (L.) Carr.
Pine group includes —
  Shortleaf pine ..... *Pinus echinata* Mill.
  Other yellow pines:
    Pitch pine ..... *P. rigida* Mill.
    Virginia pine ..... *P. virginiana* Mill.
  White pine (eastern) ..... *P. strobus* L.
Redcedar (eastern) ..... *Juniperus virginiana* L.

## Hardwood Species

Ash ..... *Fraxinus* L. species
Basswood ..... *Tilia* L. species
Beech (American) ..... *Fagus grandifolia* Ehrh.
Birch (yellow) ..... *Betula alleghaniensis* Britton
Blackgum ..... *Nyssa* L. species
Black walnut ..... *Juglans nigra* L.
Cottonwood (eastern) ..... *Populus deltoides* Bartr.
Hickory ..... *Carya* Nutt. species
Maple (hard) includes —
  Black maple ..... *Acer nigrum* Michx. f.
  Sugar maple ..... *A. saccharum* Marsh.
Maple (soft) includes —
  Boxelder ..... *A. negundo* L.
  Red maple ..... *A. rubrum* var. *rubrum* L.
  Silver maple ..... *A. saccharinum* L.
Oak group includes —
  Select red oaks:
    Cherrybark oak ..... *Quercus falcata* var. *pagodaefolia* Ell.
    Northern red oak ..... *Q. rubra* L.
    Shumard oak ..... *Q. shumardii* Buckl.
  Other red oaks:
    Black oak ..... *Q. velutina* Lam.
    Pin oak ..... *Q. palustris* Muenchh.
    Scarlet oak ..... *Q. coccinea* Muenchh.
    Shingle oak ..... *Q. imbricaria* Michx.
    Southern red oak ..... *Q. falcata* Michx.
    Water oak ..... *Q. nigra* L.
    Willow oak ..... *Q. phellos* L.
  Select white oaks:
    Bur oak ..... *Q. macrocarpa* Michx.
    Chinkapin oak ..... *Q. muehlenbergii* Engelm.

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[2]The common and scientific names are based on: Little, Elbert L., Jr. CHECK LIST OF NATIVE AND NATURALIZED TREES OF THE UNITED STATES (INCLUDING ALASKA). U.S. Dept. Agr. Handb. 41, 472 pp. 1953.

Swamp chestnut oak ..... *Q. michauxii* Nutt.
Swamp white oak ..... *Q. bicolor* Willd.
White oak ..... *Q. alba* L.
Other white oaks:
Chestnut oak ..... *Q. prinus* L.
Overcup oak ..... *Q. lyrata* Walt.
Post oak ..... *Q. stellata* var. *stellata* Wangenh.
Sweetgum ..... *Liquidambar styraciflua* L.
Yellow-poplar ..... *Liriodendron tulipifera* L.

Other hardwoods includes —
Birch (river) ..... *Betula nigra* L.
Buckeye (Ohio) ..... *Aesculus glabra* Willd.
Buckeye (yellow) ..... *A. octandra* Marsh.
Butternut ..... *Juglans cinerea* L.
Cherry (black) ..... *Prunus serotina* Ehrh.
Coffeetree (Kentucky) ..... *Gymnocladus dioicus* (L.) K. Koch.
Cucumbertree ..... *Magnolia acuminata* L.
Dogwood (flowering) ..... *Cornus florida* L.
Elm ..... *Ulmus* L. species
Hackberry ..... *Celtis occidentalis* L.
Honeylocust ..... *Gleditsia triacanthos* L.
Locust (black) ..... *Robinia pseudoacacia* L.
Mulberry (red) ..... *Morus rubra* L.
Osage-orange ..... *Maclura pomifera* (Raf.) Schneid.
Persimmon (common) ..... *Diospyros virginiana* L.
Sassafras ..... *Sassafras albidum* (Nutt.) Nees
Sycamore (American) ..... *Platanus occidentalis* L.
Willow (black) ..... *Salix nigra* Marsh.

# Statistical Tables

The following tables present forest-resource data for the Northern Cumberland Unit and each of its 13 counties. Tables 1-7 contain information on land and forest area; tables 8-12 information on numbers of trees and timber volume; and tables 13-18 information on growth, cut, and desirable cut. Data for individual counties are shown in tables 1, 4, 10, 14, and 18.

Table 1. -- *Area of land and forest land by counties*
*Northern Cumberland Unit, Kentucky, 1963*

| County | Gross area* | Land area* | Forest land | | | Commercial forest as a percent of land area |
|---|---|---|---|---|---|---|
| | | | All forest | Non-commercial | Commercial | |
| | *Acres* | *Acres* | *Acres* | *Acres* | *Acres* | *Percent* |
| Boyd | 103,000 | 101,700 | 57,200 | 100 | 57,100 | 56.1 |
| Carter | 257,300 | 257,300 | 181,900 | 1,100 | 180,800 | 70.3 |
| Elliott | 153,600 | 153,600 | 114,100 | 100 | 114,000 | 74.2 |
| Greenup | 229,100 | 224,000 | 158,000 | 3,100 | 154,900 | 69.2 |
| Johnson | 169,000 | 169,000 | 136,900 | 200 | 136,700 | 80.9 |
| Lawrence | 272,000 | 272,000 | 222,800 | 900 | 221,900 | 81.6 |
| Lewis | 318,700 | 310,400 | 226,200 | 300 | 225,900 | 72.8 |
| Magoffin | 193,900 | 193,900 | 161,000 | 1,600 | 159,400 | 82.2 |
| Menifee | 134,400 | 134,400 | 109,400 | 300 | 109,100 | 81.2 |
| Morgan | 236,200 | 236,200 | 171,100 | 900 | 170,200 | 72.1 |
| Powell | 110,700 | 110,700 | 82,200 | 1,500 | 80,700 | 72.9 |
| Rowan | 185,600 | 185,600 | 141,800 | 1,000 | 140,800 | 75.9 |
| Wolfe | 145,300 | 145,300 | 106,800 | 500 | 106,300 | 73.2 |
| Total | 2,508,800 | 2,494,100 | 1,869,400 | 11,600 | 1,857,800 | 74.5 |

* Gross area and land area are from Bureau of Census, 1960. Land area includes 6,400 acres in small bodies of water.

Table 2. -- *Area of commercial forest land by ownership and stand-size class*
*Northern Cumberland Unit, Kentucky, 1963*

(In acres)

| Ownership class | All Stands | Saw-timber | Pole-timber | Seedlings and saplings | Non-stocked |
|---|---|---|---|---|---|
| National forest | 109,200 | 84,600 | 23,100 | 600 | 900 |
| Other public | 800 | 400 | 200 | 200 | -- |
| Forest industry | 5,200 | 5,200 | -- | -- | -- |
| Farmer and miscellaneous private | 1,742,600 | 757,300 | 480,600 | 504,700 | -- |
| All ownerships | 1,857,800 | 847,500 | 503,900 | 505,500 | 900 |

Table 3. -- *Area of commercial forest land by stocking and stand-size class*
*Northern Cumberland Unit, Kentucky, 1963*

(In acres)

| Stocking class (percent) | All stands | Saw-timber | Pole-timber | Seedlings and saplings | Non-stocked |
|---|---|---|---|---|---|
| 70 or more | 819,400 | 410,800 | 214,000 | 194,600 | -- |
| 40-70 | 896,300 | 403,800 | 237,100 | 255,400 | -- |
| 10-40 | 141,200 | 32,900 | 52,800 | 55,500 | -- |
| Less than 10 | 900 | -- | -- | -- | 900 |
| All classes | 1,857,800 | 847,500 | 503,900 | 505,500 | 900 |

Table 4. -- *Area of commercial forest land by forest type and stand-size class*
*Northern Cumberland Unit, Kentucky, 1963*

(In acres)

| Forest type | All stands | Saw-timber | Pole-timber | Seedlings and saplings | Non-stocked |
|---|---|---|---|---|---|
| Southern pine | 99,500 | 43,300 | 26,300 | 29,900 | -- |
| Oak-pine | 151,200 | 64,400 | 48,000 | 38,300 | 500 |
| White oak | 89,400 | 38,900 | 43,400 | 7,100 | -- |
| Oak-hickory | 917,900 | 501,400 | 253,000 | 163,200 | 300 |
| Central mixed hardwoods | 534,200 | 178,100 | 105,300 | 250,700 | 100 |
| Maple-beech | 43,500 | 21,000 | 22,500 | -- | -- |
| Elm-ash-cottonwood | 22,100 | 400 | 5,400 | 16,300 | -- |
| All types | 1,857,800 | 847,500 | 503,900 | 505,500 | 900 |
| **BOYD COUNTY** | | | | | |
| Southern pine | 4,500 | 3,300 | 300 | 900 | -- |
| Oak-pine | 5,700 | 1,500 | 2,600 | 1,600 | -- |
| White oak | 2,700 | 1,200 | 1,400 | 100 | -- |
| Oak-hickory | 25,600 | 12,900 | 7,100 | 5,600 | -- |
| Central mixed hardwoods | 16,400 | 4,200 | 3,000 | 9,200 | -- |
| Maple-beech | 1,000 | 600 | 400 | -- | -- |
| Elm-ash-cottonwood | 1,200 | -- | 100 | 1,100 | -- |
| All types | 57,100 | 23,700 | 14,900 | 18,500 | -- |
| **CARTER COUNTY** | | | | | |
| Southern pine | 12,300 | 4,700 | 3,100 | 4,500 | -- |
| Oak-pine | 16,600 | 6,100 | 5,700 | 4,800 | -- |
| White oak | 9,400 | 3,900 | 5,000 | 500 | -- |
| Oak-hickory | 81,300 | 42,000 | 23,100 | 16,200 | -- |
| Central mixed hardwoods | 54,600 | 15,500 | 10,400 | 28,700 | -- |
| Maple beech | 4,900 | 2,300 | 2,600 | -- | -- |
| Elm-ash-cottonwood | 1,700 | -- | 300 | 1,400 | -- |
| All types | 180,800 | 74,500 | 50,200 | 56,100 | -- |

Table 4. -- *Area of commercial forest land by forest type and stand-size class*
*Northern Cumberland Unit, Kentucky, 1963 -- Continued*

(In acres)

ELLIOTT COUNTY

| Forest type | All Stands | Saw-timber | Pole-timber | Seedlings and saplings | Non-stocked |
|---|---|---|---|---|---|
| Southern pine | 14,100 | 7,500 | 3,000 | 3,600 | -- |
| Oak-pine | 10,100 | 5,300 | 3,600 | 1,200 | -- |
| White oak | 6,300 | 2,900 | 2,900 | 500 | -- |
| Oak-hickory | 53,400 | 31,700 | 14,200 | 7,500 | -- |
| Central mixed hardwoods | 26,900 | 8,800 | 6,100 | 12,000 | -- |
| Maple-beech | 2,700 | 1,200 | 1,500 | -- | -- |
| Elm-ash-cottonwood | 500 | -- | -- | 500 | -- |
| All types | 114,000 | 57,400 | 31,300 | 25,300 | -- |

GREENUP COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 6,900 | 2,600 | 1,700 | 2,600 | -- |
| Oak-pine | 12,600 | 6,700 | 3,200 | 2,700 | -- |
| White oak | 9,100 | 5,000 | 3,300 | 800 | -- |
| Oak-hickory | 77,600 | 43,500 | 20,000 | 14,100 | -- |
| Central mixed hardwoods | 43,000 | 15,400 | 7,600 | 20,000 | -- |
| Maple-beech | 4,800 | 2,500 | 2,300 | -- | -- |
| Elm-ash-cottonwood | 900 | -- | -- | 900 | -- |
| All types | 154,900 | 75,700 | 38,100 | 41,100 | -- |

JOHNSON COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 5,700 | 2,500 | 1,000 | 2,200 | -- |
| Oak-pine | 10,500 | 5,900 | 2,700 | 1,900 | -- |
| White oak | 8,000 | 4,600 | 2,700 | 700 | -- |
| Oak-hickory | 70,100 | 37,800 | 19,700 | 12,600 | -- |
| Central mixed hardwoods | 37,600 | 14,000 | 7,900 | 15,700 | -- |
| Maple-beech | 4,000 | 1,700 | 2,300 | -- | -- |
| Elm-ash-cottonwood | 800 | -- | 400 | 400 | -- |
| All types | 136,700 | 66,500 | 36,700 | 33,500 | -- |

LAWRENCE COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 10,800 | 3,100 | 1,700 | 6,000 | -- |
| Oak-pine | 16,800 | 2,800 | 5,100 | 8,900 | -- |
| White oak | 8,500 | 500 | 7,000 | 1,000 | -- |
| Oak-hickory | 91,200 | 27,900 | 34,200 | 29,100 | -- |
| Central mixed hardwoods | 86,400 | 16,000 | 13,800 | 56,600 | -- |
| Maple-beech | 3,200 | 1,200 | 2,000 | -- | -- |
| Elm-ash-cottonwood | 5,000 | -- | 1,500 | 3,500 | -- |
| All types | 221,900 | 51,500 | 65,300 | 105,100 | -- |

LEWIS COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 3,600 | 1,900 | 1,300 | 400 | -- |
| Oak-pine | 14,700 | 7,700 | 3,100 | 3,900 | -- |
| White oak | 13,500 | 7,400 | 5,500 | 600 | -- |
| Oak-hickory | 130,800 | 83,200 | 32,000 | 15,600 | -- |
| Central mixed hardwoods | 55,000 | 22,200 | 10,300 | 22,500 | -- |
| Maple-beech | 6,900 | 3,000 | 3,900 | -- | -- |
| Elm-ash-cottonwood | 1,400 | -- | 100 | 1,300 | -- |
| All types | 225,900 | 125,400 | 56,200 | 44,300 | -- |

Table 4. -- *Area of commercial forest land by forest type and stand-size class*
*Northern Cumberland Unit, Kentucky, 1963 -- Continued*

(In acres)

MAGOFFIN COUNTY

| Forest type | All stands | Saw-timber | Pole-timber | Seedlings and saplings | Non-stocked |
|---|---|---|---|---|---|
| Southern pine | 3,300 | 1,000 | 1,900 | 400 | -- |
| Oak-pine | 8,700 | 2,100 | 2,100 | 4,500 | -- |
| White oak | 4,800 | 1,300 | 2,600 | 900 | -- |
| Oak-hickory | 78,800 | 35,500 | 22,800 | 20,500 | -- |
| Central mixed hardwoods | 56,300 | 15,900 | 12,300 | 28,100 | -- |
| Maple-beech | 3,500 | 2,400 | 1,100 | -- | -- |
| Elm-ash-cottonwood | 4,000 | -- | 1,600 | 2,400 | -- |
| All types | 159,400 | 58,200 | 44,400 | 56,800 | -- |

MENIFEE COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 8,400 | 3,200 | 4,300 | 900 | -- |
| Oak-pine | 12,100 | 6,100 | 4,600 | 1,200 | 200 |
| White oak | 4,800 | 2,400 | 2,100 | 300 | -- |
| Oak-hickory | 51,500 | 33,900 | 12,400 | 5,200 | -- |
| Central mixed hardwoods | 29,900 | 16,000 | 7,700 | 6,200 | -- |
| Maple-beech | 2,000 | 900 | 1,100 | -- | -- |
| Elm-ash-cottonwood | 400 | 100 | -- | 300 | -- |
| All types | 109,100 | 62,600 | 32,200 | 14,100 | 200 |

MORGAN COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 6,800 | 2,700 | 1,300 | 2,800 | -- |
| Oak-pine | 12,300 | 3,900 | 4,500 | 3,900 | -- |
| White oak | 7,300 | 3,000 | 3,500 | 800 | -- |
| Oak-hickory | 86,100 | 48,800 | 21,500 | 15,700 | 100 |
| Central mixed hardwoods | 50,200 | 15,700 | 10,300 | 24,200 | -- |
| Maple-beech | 3,700 | 2,000 | 1,700 | -- | -- |
| Elm-ash-cottonwood | 3,800 | -- | 1,100 | 2,700 | -- |
| All types | 170,200 | 76,100 | 43,900 | 50,100 | 100 |

POWELL COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 2,900 | 1,200 | 400 | 1,300 | -- |
| Oak-pine | 6,900 | 3,300 | 2,700 | 900 | -- |
| White oak | 3,900 | 1,800 | 1,900 | 200 | -- |
| Oak-hickory | 42,700 | 24,600 | 12,400 | 5,700 | -- |
| Central mixed hardwoods | 21,500 | 10,800 | 3,700 | 7,000 | -- |
| Maple-beech | 2,300 | 900 | 1,400 | -- | -- |
| Elm-ash-cottonwood | 500 | 300 | -- | 200 | -- |
| All types | 80,700 | 42,900 | 22,500 | 15,300 | -- |

ROWAN COUNTY

| | | | | | |
|---|---|---|---|---|---|
| Southern pine | 9,000 | 3,800 | 3,000 | 2,200 | -- |
| Oak-pine | 12,100 | 5,900 | 4,500 | 1,400 | 300 |
| White oak | 6,300 | 3,000 | 2,900 | 400 | -- |
| Oak-hickory | 80,100 | 53,700 | 18,900 | 7,300 | 200 |
| Central mixed hardwoods | 29,700 | 12,200 | 7,500 | 9,900 | 100 |
| Maple-beech | 2,300 | 1,100 | 1,200 | -- | -- |
| Elm-ash-cottonwood | 1,300 | -- | 200 | 1,100 | -- |
| All types | 140,800 | 79,700 | 38,200 | 22,300 | 600 |

Table 4. -- *Area of commercial forest land by forest type and stand-size class*
*Northern Cumberland Unit, Kentucky, 1963 -- Continued*

(In acres)

WOLFE COUNTY

| Forest type | All Stands | Saw-timber | Pole-timber | Seedlings and saplings | Non-stocked |
|---|---|---|---|---|---|
| Southern pine | 11,200 | 5,800 | 3,300 | 2,100 | -- |
| Oak-pine | 12,100 | 7,100 | 3,600 | 1,400 | -- |
| White oak | 4,800 | 1,900 | 2,600 | 300 | -- |
| Oak-hickory | 48,700 | 25,900 | 14,700 | 8,100 | -- |
| Central mixed hardwoods | 26,700 | 11,400 | 4,700 | 10,600 | -- |
| Maple-beech | 2,200 | 1,200 | 1,000 | -- | -- |
| Elm-ash-cottonwood | 600 | -- | 100 | 500 | -- |
| All types | 106,300 | 53,300 | 30,000 | 23,000 | -- |

Table 5. -- *Area of commercial forest land by forest type and site class*
*Northern Cumberland Unit, Kentucky, 1963*

(In acres)

| Forest type | All Sites | Site class (potential growth per acre per year in cubic feet) | | | |
|---|---|---|---|---|---|
| | | 120 or more | 85 to 120 | 50 to 85 | Less than 50 |
| Southern pine | 99,500 | 2,600 | 46,000 | 34,500 | 16,400 |
| Oak-pine | 151,200 | 9,500 | 76,500 | 61,200 | 4,000 |
| White oak | 89,400 | 400 | 48,900 | 35,600 | 4,500 |
| Oak-hickory | 917,900 | 51,200 | 508,200 | 341,800 | 16,700 |
| Central mixed hardwoods | 534,200 | 13,100 | 144,100 | 264,000 | 113,000 |
| Maple-beech | 43,500 | -- | 25,800 | 7,900 | 9,800 |
| Elm-ash-cottonwood | 22,100 | 7,600 | 300 | 14,200 | -- |
| All types | 1,857,800 | 84, 400 | 849,800 | 759,200 | 164,400 |

Table 6. -- *Area of commercial forest land by forest type and stand-age class*
*Northern Cumberland Unit, Kentucky, 1963*

(In acres by age in years)

| Forest type | All ages | Less than 9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-79 | 80-99 | 100 or more |
|---|---|---|---|---|---|---|---|---|---|---|
| Southern pine | 99,500 | -- | 23,000 | 13,600 | 27,100 | 10,200 | 18,700 | 6,200 | 500 | 200 |
| Oak-pine | 151,200 | 9,900 | 10,000 | 45,200 | 26,900 | 21,500 | 14,100 | 17,100 | 6,000 | 500 |
| White oak | 89,400 | -- | 8,500 | 800 | 17,400 | 13,400 | 15,700 | 27,800 | 5,600 | 200 |
| Oak-hickory | 917,900 | 4,100 | 62,100 | 105,900 | 139,500 | 189,600 | 157,400 | 117,800 | 121,300 | 20,200 |
| Central mixed hardwoods | 534,200 | 24,100 | 122,800 | 170,000 | 72,600 | 65,800 | 18,200 | 37,200 | 22,600 | 900 |
| Maple-beech | 43,500 | 4,000 | -- | 3,900 | -- | 19,200 | 5,400 | 5,400 | -- | 5,600 |
| Elm-ash-cottonwood | 22,100 | -- | 16,100 | 300 | -- | 5,600 | -- | 100 | -- | -- |
| All types | 1,857,800 | 42,100 | 242,500 | 339,700 | 283,500 | 325,300 | 229,500 | 211,600 | 156,000 | 27,600 |

Table 7. -- *Area of commercial forest land by forest type and area condition class*
*Northern Cumberland Unit, Kentucky, 1963*

(In acres)

| Forest type | All area conditions | Desirable | Moderate and favorable | Moderate and unfavorable | Poor but favorable | Poor and unfavorable |
|---|---|---|---|---|---|---|
| Southern pine | 99,500 | 600 | 13,900 | 29,100 | 5,300 | 50,600 |
| Oak-pine | 151,200 | 1,800 | 7,500 | 15,300 | 15,700 | 110,900 |
| White oak | 89,400 | 600 | 13,300 | 1,500 | 7,900 | 66,100 |
| Oak-hickory | 917,900 | 10,100 | 109,000 | 99,400 | 50,300 | 649,100 |
| Central mixed hardwoods | 534,200 | 3,300 | 39,800 | 81,400 | 62,800 | 346,900 |
| Maple-beech | 43,500 | -- | -- | -- | 3,900 | 39,600 |
| Elm-ash-cottonwood | 22,100 | 4,500 | -- | -- | 2,700 | 14,900 |
| All types | 1,857,800 | 20,900 | 183,500 | 226,700 | 148,600 | 1,278,100 |

Table 8. -- *Number of growing stock trees on commercial forest land by diameter class and species group*
*Northern Cumberland Unit, Kentucky, 1963*

(In thousand trees)

| D.b.h. class (inches) | All species | Softwoods | Hardwoods |
|---|---|---|---|
| 2 | 365,390 | 24,130 | 341,260 |
| 4 | 139,940 | 21,170 | 118,770 |
| 6 | 67,330 | 10,620 | 56,710 |
| 8 | 36,580 | 6,190 | 30,390 |
| 10 | 23,590 | 3,130 | 20,460 |
| 12 | 15,340 | 1,910 | 13,430 |
| 14 | 8,480 | 710 | 7,770 |
| 16 | 3,970 | 270 | 3,700 |
| 18 | 2,120 | 90 | 2,030 |
| 20 | 970 | 60 | 910 |
| 22 | 590 | 40 | 550 |
| 24+ | 560 | 20 | 540 |
| All diameter classes | 664,860 | 68,340 | 596,520 |

Table 9. -- *Volume of growing stock and sawtimber on commercial forest land by ownership and species group*
*Northern Cumberland Unit, Kentucky, 1963*

| Ownership class | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | All species | Softwoods | Hardwoods | All species | Softwoods | Hardwoods |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| National Forest | 120,740 | 26,770 | 93,970 | 293,260 | 76,990 | 216,270 |
| Other public | 510 | 50 | 460 | 1,790 | 180 | 1,610 |
| Forest industry | 3,220 | -- | 3,220 | 11,330 | -- | 11,330 |
| Farmer and miscellaneous private | 1,063,660 | 115,240 | 948,420 | 3,628,330 | 398,350 | 3,229,980 |
| All ownerships | 1,188,130 | 142,060 | 1,046,070 | 3,934,710 | 475,520 | 3,459,190 |

*International ¼-inch rule.

Table 10. -- *Volume of growing stock and sawtimber on commercial forest land by species and kind of material*
*Northern Cumberland Unit, Kentucky, 1963*

ALL COUNTIES

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 49,560 | 13,860 | 35,700 | 199,930 | 153,270 | 46,660 |
| Other yellow pines | 70,310 | 30,180 | 40,130 | 208,830 | 146,190 | 62,640 |
| White pine | 8,830 | 1,740 | 7,090 | 31,320 | 17,760 | 13,560 |
| Hemlock | 12,950 | 4,100 | 8,850 | 34,860 | 29,590 | 5,270 |
| Redcedar | 410 | -- | 410 | 580 | 580 | -- |
| Total softwoods | 142,060 | 49,880 | 92,180 | 475,520 | 347,390 | 128,130 |
| Hardwoods: | | | | | | |
| Select white oak | 189,390 | 97,690 | 91,700 | 499,780 | 383,300 | 116,480 |
| Select red oak | 47,810 | 11,610 | 36,200 | 213,830 | 183,420 | 30,410 |
| Other white oak | 130,070 | 52,500 | 77,570 | 424,670 | 368,000 | 56,670 |
| Other red oak | 307,820 | 93,380 | 214,440 | 1,256,640 | 1,070,250 | 186,390 |
| Hickories | 124,140 | 69,500 | 54,640 | 300,730 | 260,620 | 40,110 |
| Yellow birch | 420 | 380 | 40 | 160 | 160 | -- |
| Hard maple | 12,260 | 6,370 | 5,890 | 29,460 | 22,990 | 6,470 |
| Beech | 37,530 | 9,650 | 27,880 | 161,230 | 136,370 | 24,860 |
| Black walnut | 7,540 | 4,100 | 3,440 | 18,070 | 13,590 | 4,480 |
| Ash | 10,520 | 5,020 | 5,500 | 28,670 | 28,580 | 90 |
| Soft maple | 20,800 | 11,570 | 9,230 | 52,660 | 46,600 | 6,060 |
| Sweetgum | 1,570 | 630 | 940 | 4,650 | 1,510 | 3,140 |
| Blackgum | 9,560 | 3,400 | 6,160 | 35,660 | 33,350 | 2,310 |
| Cottonwood | 420 | -- | 420 | 2,020 | 280 | 1,740 |
| Yellow-poplar | 112,660 | 49,420 | 63,240 | 356,800 | 300,760 | 56,040 |
| Basswood | 7,500 | 2,250 | 5,250 | 29,080 | 22,600 | 6,480 |
| Other | 26,060 | 17,260 | 8,800 | 45,080 | 28,610 | 16,470 |
| Total hardwoods | 1,046,070 | 434,730 | 611,340 | 3,459,190 | 2,900,990 | 558,200 |
| All species | 1,188,130 | 484,610 | 703,520 | 3,934,710 | 3,248,380 | 686,330 |

BOYD COUNTY

| | | | | | | |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Shortleaf pine | 3,090 | 1,010 | 2,080 | 12,150 | 10,810 | 1,340 |
| Other yellow pines | 2,150 | 770 | 1,380 | 7,710 | 5,340 | 2,370 |
| White pine | 210 | 60 | 150 | 840 | 40 | 800 |
| Hemlock | 350 | 240 | 110 | 560 | 230 | 330 |
| Redcedar | 70 | -- | 70 | 100 | 100 | -- |
| Total softwoods | 5,870 | 2,080 | 3,790 | 21,360 | 16,520 | 4,840 |
| Hardwoods: | | | | | | |
| Select white oak | 5,070 | 2,650 | 2,420 | 13,610 | 10,370 | 3,240 |
| Select red oak | 1,130 | 270 | 860 | 5,280 | 4,660 | 620 |
| Other white oak | 4,110 | 1,520 | 2,590 | 14,670 | 12,830 | 1,840 |
| Other red oak | 8,980 | 2,840 | 6,140 | 37,190 | 30,580 | 6,610 |
| Hickories | 3,380 | 2,090 | 1,290 | 7,400 | 6,660 | 740 |
| Yellow birch | -- | -- | -- | -- | -- | -- |
| Hard maple | 330 | 180 | 150 | 720 | 450 | 270 |
| Beech | 960 | 230 | 730 | 4,290 | 3,720 | 570 |
| Black walnut | 190 | 120 | 70 | 420 | 280 | 140 |
| Ash | 300 | 120 | 180 | 950 | 950 | -- |
| Soft maple | 570 | 330 | 240 | 1,360 | 1,100 | 260 |
| Sweetgum | 30 | 20 | 10 | 100 | -- | 100 |
| Blackgum | 260 | 90 | 170 | 990 | 790 | 200 |
| Cottonwood | 10 | -- | 10 | 40 | -- | 40 |
| Yellow-poplar | 2,670 | 1,080 | 1,590 | 9,440 | 7,720 | 1,720 |
| Basswood | 210 | 70 | 140 | 810 | 540 | 270 |
| Other | 810 | 520 | 290 | 1,550 | 820 | 730 |
| Total hardwoods | 29,010 | 12,130 | 16,880 | 98,820 | 81,470 | 17,350 |
| All species | 34,880 | 14,210 | 20,670 | 120,180 | 97,990 | 22,190 |

*International ¼-inch rule.

Table 10. -- *Volume of growing stock and sawtimber on commercial forest land by species and kind of material Northern Cumberland Unit, Kentucky, 1963 -- Continued*

CARTER COUNTY

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 4,590 | 1,440 | 3,150 | 18,670 | 14,570 | 4,100 |
| Other yellow pines | 7,020 | 3,040 | 3,980 | 22,340 | 14,930 | 7,410 |
| White pine | 530 | 160 | 370 | 2,130 | 450 | 1,680 |
| Hemlock | 860 | 560 | 300 | 1,540 | 870 | 670 |
| Redcedar | 70 | -- | 70 | 90 | 90 | -- |
| Total softwoods | 13,070 | 5,200 | 7,870 | 44,770 | 30,910 | 13,860 |
| Hardwoods: | | | | | | |
| Select white oak | 16,920 | 8,730 | 8,190 | 46,070 | 33,370 | 12,700 |
| Select red oak | 4,080 | 980 | 3,100 | 19,120 | 16,000 | 3,120 |
| Other white oak | 11,780 | 4,720 | 7,060 | 39,390 | 33,850 | 5,540 |
| Other red oak | 27,630 | 8,320 | 19,310 | 116,510 | 97,420 | 19,090 |
| Hickories | 11,030 | 6,440 | 4,590 | 26,370 | 22,130 | 4,240 |
| Yellow birch | 30 | 30 | -- | -- | -- | -- |
| Hard maple | 1,170 | 640 | 530 | 2,690 | 2,080 | 610 |
| Beech | 3,580 | 1,000 | 2,580 | 15,100 | 12,210 | 2,890 |
| Black walnut | 700 | 390 | 310 | 1,710 | 1,230 | 480 |
| Ash | 1,030 | 530 | 500 | 2,680 | 2,680 | -- |
| Soft maple | 1,830 | 1,050 | 780 | 4,620 | 4,070 | 550 |
| Sweetgum | 130 | 70 | 60 | 370 | -- | 370 |
| Blackgum | 780 | 280 | 500 | 3,020 | 2,850 | 170 |
| Cottonwood | 20 | -- | 20 | 100 | -- | 100 |
| Yellow-poplar | 9,240 | 4,200 | 5,040 | 29,970 | 24,820 | 5,150 |
| Basswood | 690 | 230 | 460 | 2,640 | 2,010 | 630 |
| Other | 2,410 | 1,620 | 790 | 4,260 | 2,300 | 1,960 |
| Total hardwoods | 93,050 | 39,230 | 53,820 | 314,620 | 257,020 | 57,600 |
| All species | 106,120 | 44,430 | 61,690 | 359,390 | 287,930 | 71,460 |

ELLIOTT COUNTY

| | | | | | | |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Shortleaf pine | 5,520 | 2,040 | 3,480 | 20,770 | 18,090 | 2,680 |
| Other yellow pines | 7,490 | 3,240 | 4,250 | 23,910 | 19,280 | 4,630 |
| White pine | 310 | 90 | 220 | 1,210 | 330 | 880 |
| Hemlock | 400 | 270 | 130 | 710 | 450 | 260 |
| Redcedar | 80 | -- | 80 | 100 | 100 | -- |
| Total softwoods | 13,800 | 5,640 | 8,160 | 46,700 | 38,250 | 8,450 |
| Hardwoods: | | | | | | |
| Select white oak | 12,700 | 6,610 | 6,090 | 34,440 | 26,310 | 8,130 |
| Select red oak | 2,700 | 610 | 2,090 | 12,940 | 11,130 | 1,810 |
| Other white oak | 8,520 | 3,260 | 5,260 | 29,570 | 26,200 | 3,370 |
| Other red oak | 19,000 | 5,290 | 13,710 | 82,850 | 70,820 | 12,030 |
| Hickories | 7,310 | 4,200 | 3,110 | 17,800 | 15,000 | 2,800 |
| Yellow birch | 20 | 20 | -- | -- | -- | -- |
| Hard maple | 660 | 350 | 310 | 1,640 | 1,340 | 300 |
| Beech | 2,090 | 600 | 1,490 | 8,700 | 7,290 | 1,410 |
| Black walnut | 440 | 270 | 170 | 910 | 680 | 230 |
| Ash | 580 | 280 | 300 | 1,630 | 1,630 | -- |
| Soft maple | 1,330 | 780 | 550 | 3,200 | 2,830 | 370 |
| Sweetgum | 70 | 20 | 50 | 260 | -- | 260 |
| Blackgum | 650 | 220 | 430 | 2,590 | 2,310 | 280 |
| Cottonwood | 30 | -- | 30 | 160 | -- | 160 |
| Yellow-poplar | 6,020 | 2,660 | 3,360 | 19,900 | 16,600 | 3,300 |
| Basswood | 360 | 120 | 240 | 1,360 | 1,040 | 320 |
| Other | 1,400 | 970 | 430 | 2,210 | 1,460 | 750 |
| Total hardwoods | 63,880 | 26,260 | 37,620 | 220,160 | 184,640 | 35,520 |
| All species | 77,680 | 31,900 | 45,780 | 266,860 | 222,890 | 43,970 |

*International ¼-inch rule.

Table 10. -- *Volume of growing stock and sawtimber on commercial forest land by species and kind of material Northern Cumberland Unit, Kentucky, 1963 -- Continued*

GREENUP COUNTY

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 4,010 | 1,090 | 2,920 | 17,340 | 14,010 | 3,330 |
| Other yellow pines | 4,830 | 2,140 | 2,690 | 15,250 | 10,060 | 5,190 |
| White pine | 310 | 100 | 210 | 1,210 | 630 | 580 |
| Hemlock | 280 | 90 | 190 | 940 | 790 | 150 |
| Redcedar | -- | -- | -- | -- | -- | -- |
| Total softwoods | 9,430 | 3,420 | 6,010 | 34,740 | 25,490 | 9,250 |
| Hardwoods: | | | | | | |
| Select white oak | 16,220 | 7,870 | 8,350 | 46,980 | 36,720 | 10,260 |
| Select red oak | 4,150 | 930 | 3,220 | 19,660 | 17,130 | 2,530 |
| Other white oak | 10,770 | 4,300 | 6,470 | 35,800 | 31,100 | 4,700 |
| Other red oak | 26,400 | 7,260 | 19,140 | 115,210 | 101,700 | 13,510 |
| Hickories | 10,150 | 5,640 | 4,510 | 25,960 | 22,450 | 3,510 |
| Yellow birch | 50 | 50 | -- | -- | -- | -- |
| Hard maple | 1,090 | 570 | 520 | 2,720 | 2,290 | 430 |
| Beech | 3,650 | 1,070 | 2,580 | 15,000 | 12,710 | 2,290 |
| Black walnut | 640 | 320 | 320 | 1,680 | 1,230 | 450 |
| Ash | 870 | 400 | 470 | 2,560 | 2,560 | -- |
| Soft maple | 1,820 | 1,040 | 780 | 4,570 | 4,300 | 270 |
| Sweetgum | 120 | 30 | 90 | 530 | -- | 530 |
| Blackgum | 700 | 260 | 440 | 2,670 | 2,630 | 40 |
| Cottonwood | 20 | -- | 20 | 120 | -- | 120 |
| Yellow-poplar | 8,160 | 3,400 | 4,760 | 28,140 | 23,740 | 4,400 |
| Basswood | 660 | 210 | 450 | 2,580 | 1,910 | 670 |
| Other | 2,120 | 1,450 | 670 | 3,630 | 2,130 | 1,500 |
| Total hardwoods | 87,590 | 34,800 | 52,790 | 307,810 | 262,600 | 45,210 |
| All species | 97,020 | 38,220 | 58,800 | 342,550 | 288,090 | 54,460 |

JOHNSON COUNTY

| | | | | | | |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Shortleaf pine | 2,450 | 390 | 2,060 | 12,240 | 8,770 | 3,470 |
| Other yellow pines | 4,310 | 1,840 | 2,470 | 13,960 | 9,690 | 4,270 |
| White pine | 250 | 70 | 180 | 1,070 | 540 | 530 |
| Hemlock | 310 | 140 | 170 | 860 | 720 | 140 |
| Redcedar | 50 | -- | 50 | 60 | 60 | -- |
| Total softwoods | 7,370 | 2,440 | 4,930 | 28,190 | 19,780 | 8,410 |
| Hardwoods: | | | | | | |
| Select white oak | 14,390 | 6,960 | 7,430 | 41,680 | 32,340 | 9,340 |
| Select red oak | 3,730 | 890 | 2,840 | 17,420 | 14,760 | 2,660 |
| Other white oak | 10,140 | 3,860 | 6,280 | 35,040 | 30,480 | 4,560 |
| Other red oak | 23,450 | 6,790 | 16,660 | 100,450 | 87,100 | 13,350 |
| Hickories | 9,000 | 4,980 | 4,020 | 23,080 | 19,530 | 3,550 |
| Yellow birch | 50 | 50 | -- | -- | -- | -- |
| Hard maple | 990 | 560 | 430 | 2,250 | 1,950 | 300 |
| Beech | 3,250 | 950 | 2,300 | 13,250 | 10,660 | 2,590 |
| Black walnut | 630 | 320 | 310 | 1,670 | 1,230 | 440 |
| Ash | 820 | 390 | 430 | 2,310 | 2,310 | -- |
| Soft maple | 1,600 | 930 | 670 | 3,900 | 3,560 | 340 |
| Sweetgum | 90 | 40 | 50 | 310 | -- | 310 |
| Blackgum | 630 | 240 | 390 | 2,380 | 2,340 | 40 |
| Cottonwood | 30 | -- | 30 | 140 | -- | 140 |
| Yellow-poplar | 7,660 | 3,420 | 4,240 | 25,070 | 21,210 | 3,860 |
| Basswood | 580 | 170 | 410 | 2,340 | 1,630 | 710 |
| Other | 1,810 | 1,230 | 580 | 2,990 | 1,700 | 1,290 |
| Total hardwoods | 78,850 | 31,780 | 47,070 | 274,280 | 230,800 | 43,480 |
| All species | 86,220 | 34,220 | 52,000 | 302,470 | 250,580 | 51,890 |

*International ¼-inch rule.

Table 10. -- *Volume of growing stock and sawtimber on commercial forest land by species and kind of material Northern Cumberland Unit, Kentucky, 1963 -- Continued*

LAWRENCE COUNTY

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 3,250 | 810 | 2,440 | 13,840 | 5,550 | 8,290 |
| Other yellow pines | 6,490 | 2,960 | 3,530 | 20,340 | 13,950 | 6,390 |
| White pine | 220 | 20 | 200 | 1,210 | 140 | 1,070 |
| Hemlock | 400 | 160 | 240 | 1,150 | 940 | 210 |
| Redcedar | 20 | -- | 20 | 20 | 20 | -- |
| Total softwoods | 10,380 | 3,950 | 6,430 | 36,560 | 20,600 | 15,960 |
| Hardwoods: | | | | | | |
| Select white oak | 15,280 | 8,930 | 6,350 | 35,760 | 17,970 | 17,790 |
| Select red oak | 3,880 | 1,270 | 2,610 | 16,180 | 12,320 | 3,860 |
| Other white oak | 10,410 | 4,830 | 5,580 | 31,200 | 24,410 | 6,790 |
| Other red oak | 20,430 | 8,030 | 12,400 | 74,170 | 52,680 | 21,490 |
| Hickories | 11,280 | 7,480 | 3,800 | 21,670 | 17,980 | 3,690 |
| Yellow birch | 20 | 20 | -- | -- | -- | -- |
| Hard maple | 1,330 | 690 | 640 | 2,950 | 1,660 | 1,290 |
| Beech | 2,880 | 730 | 2,150 | 12,710 | 9,860 | 2,850 |
| Black walnut | 780 | 440 | 340 | 1,910 | 1,350 | 560 |
| Ash | 1,040 | 570 | 470 | 2,490 | 2,490 | -- |
| Soft maple | 1,560 | 920 | 640 | 3,750 | 2,720 | 1,030 |
| Sweetgum | 100 | 80 | 20 | 100 | -- | 100 |
| Blackgum | 690 | 300 | 390 | 2,360 | 2,360 | -- |
| Cottonwood | 40 | -- | 40 | 200 | -- | 200 |
| Yellow-poplar | 11,860 | 6,520 | 5,340 | 32,110 | 23,770 | 8,340 |
| Basswood | 660 | 190 | 470 | 2,820 | 2,030 | 790 |
| Other | 2,860 | 2,040 | 820 | 4,410 | 1,480 | 2,930 |
| Total hardwoods | 85,100 | 43,040 | 42,060 | 244,790 | 173,080 | 71,710 |
| All species | 95,480 | 46,990 | 48,490 | 281,350 | 193,680 | 87,670 |

LEWIS COUNTY

| | | | | | | |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Shortleaf pine | 4,130 | 840 | 3,290 | 19,440 | 15,410 | 4,030 |
| Other yellow pines | 5,180 | 2,380 | 2,800 | 15,870 | 9,890 | 5,980 |
| White pine | 470 | 190 | 280 | 1,660 | 750 | 910 |
| Hemlock | 520 | 230 | 290 | 1,470 | 1,220 | 250 |
| Redcedar | -- | -- | -- | -- | -- | -- |
| Total softwoods | 10,300 | 3,640 | 6,660 | 38,440 | 27,270 | 11,170 |
| Hardwoods: | | | | | | |
| Select white oak | 26,910 | 13,210 | 13,700 | 77,510 | 64,230 | 13,280 |
| Select red oak | 6,800 | 1,420 | 5,380 | 32,860 | 28,830 | 4,030 |
| Other white oak | 18,740 | 6,900 | 11,840 | 65,890 | 59,100 | 6,790 |
| Other red oak | 45,550 | 11,940 | 33,610 | 203,110 | 183,230 | 19,880 |
| Hickories | 17,270 | 8,990 | 8,280 | 47,690 | 42,020 | 5,670 |
| Yellow birch | 50 | 50 | -- | -- | -- | -- |
| Hard maple | 1,680 | 870 | 810 | 4,310 | 3,490 | 820 |
| Beech | 5,420 | 1,540 | 3,880 | 22,570 | 18,900 | 3,670 |
| Black walnut | 870 | 490 | 380 | 2,120 | 1,410 | 710 |
| Ash | 1,580 | 670 | 910 | 4,780 | 4,780 | -- |
| Soft maple | 3,080 | 1,700 | 1,380 | 8,040 | 7,510 | 530 |
| Sweetgum | 130 | 90 | 40 | 260 | -- | 260 |
| Blackgum | 1,300 | 480 | 820 | 4,960 | 4,880 | 80 |
| Cottonwood | 70 | -- | 70 | 350 | -- | 350 |
| Yellow-poplar | 14,470 | 5,700 | 8,770 | 51,880 | 45,980 | 5,900 |
| Basswood | 1,030 | 350 | 680 | 3,830 | 3,100 | 730 |
| Other | 3,170 | 2,040 | 1,130 | 6,160 | 4,320 | 1,840 |
| Total hardwoods | 148,120 | 56,440 | 91,680 | 536,320 | 471,780 | 64,540 |
| All species | 158,420 | 60,080 | 98,340 | 574,760 | 499,050 | 75,710 |

*International ¼-inch rule.

Table 10. -- *Volume of growing stock and sawtimber on commercial forest land by species and kind of material Northern Cumberland Unit, Kentucky, 1963 -- Continued*

MAGOFFIN COUNTY

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 2,240 | 470 | 1,770 | 9,980 | 4,100 | 5,880 |
| Other yellow pines | 3,120 | 1,650 | 1,470 | 8,070 | 4,020 | 4,050 |
| White pine | 300 | 60 | 240 | 1,340 | 240 | 1,100 |
| Hemlock | 410 | 190 | 220 | 1,040 | 910 | 130 |
| Redcedar | -- | -- | -- | -- | -- | -- |
| Total softwoods | 6,070 | 2,370 | 3,700 | 20,430 | 9,270 | 11,160 |
| Hardwoods: | | | | | | |
| Select white oak | 13,260 | 7,430 | 5,830 | 32,830 | 23,810 | 9,020 |
| Select red oak | 3,660 | 960 | 2,700 | 16,480 | 14,180 | 2,300 |
| Other white oak | 10,640 | 4,540 | 6,100 | 34,120 | 28,170 | 5,950 |
| Other red oak | 22,550 | 7,110 | 15,440 | 94,020 | 76,030 | 17,990 |
| Hickories | 9,610 | 5,590 | 4,020 | 23,130 | 20,480 | 2,650 |
| Yellow birch | 20 | 20 | -- | -- | -- | -- |
| Hard maple | 990 | 500 | 490 | 2,400 | 1,750 | 650 |
| Beech | 3,450 | 650 | 2,800 | 17,110 | 15,240 | 1,870 |
| Black walnut | 710 | 360 | 350 | 1,860 | 1,530 | 330 |
| Ash | 850 | 440 | 410 | 2,150 | 2,150 | -- |
| Soft maple | 1,950 | 1,100 | 850 | 4,950 | 4,350 | 600 |
| Sweetgum | 40 | 30 | 10 | 110 | -- | 110 |
| Blackgum | 840 | 320 | 520 | 3,150 | 3,150 | -- |
| Cottonwood | 20 | -- | 20 | 90 | -- | 90 |
| Yellow-poplar | 10,360 | 5,190 | 5,170 | 31,110 | 24,080 | 7,030 |
| Basswood | 640 | 170 | 470 | 2,780 | 2,170 | 610 |
| Other | 2,510 | 1,840 | 670 | 3,600 | 2,120 | 1,480 |
| Total hardwoods | 82,100 | 36,250 | 45,850 | 269,890 | 219,210 | 50,680 |
| All species | 88, 170 | 38,620 | 49,550 | 290,320 | 228,480 | 61,840 |

MENIFEE COUNTY

| | | | | | | |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Shortleaf pine | 4,330 | 1,550 | 2,780 | 15,300 | 12,820 | 2,480 |
| Other yellow pines | 7,570 | 3,000 | 4,570 | 19,520 | 14,560 | 4,960 |
| White pine | 720 | 160 | 560 | 2,260 | 1,220 | 1,040 |
| Hemlock | 4,750 | 740 | 4,010 | 14,530 | 13,820 | 710 |
| Redcedar | 20 | -- | 20 | 70 | 70 | -- |
| Total softwoods | 17,390 | 5,450 | 11,940 | 51,680 | 42,490 | 9,190 |
| Hardwoods: | | | | | | |
| Select white oak | 15,080 | 7,920 | 7,160 | 34,630 | 29,210 | 5,420 |
| Select red oak | 3,320 | 790 | 2,530 | 13,450 | 11,360 | 2,090 |
| Other white oak | 7,320 | 3,150 | 4,170 | 21,570 | 19,340 | 2,230 |
| Other red oak | 20,580 | 6,510 | 14,070 | 77,590 | 66,030 | 11,560 |
| Hickories | 9,110 | 4,830 | 4,280 | 21,590 | 18,890 | 2,700 |
| Yellow birch | 90 | 50 | 40 | 160 | 160 | -- |
| Hard maple | 740 | 380 | 360 | 1,760 | 1,500 | 260 |
| Beech | 2,330 | 550 | 1,780 | 9,270 | 8,250 | 1,020 |
| Black walnut | 550 | 350 | 200 | 900 | 700 | 200 |
| Ash | 740 | 360 | 380 | 1,780 | 1,780 | -- |
| Soft maple | 1,370 | 680 | 690 | 3,890 | 3,550 | 340 |
| Sweetgum | 190 | 60 | 130 | 600 | 290 | 310 |
| Blackgum | 700 | 230 | 470 | 2,290 | 2,050 | 240 |
| Cottonwood | 20 | -- | 20 | 100 | -- | 100 |
| Yellow-poplar | 8,790 | 3,320 | 5,470 | 25,040 | 23,010 | 2,030 |
| Basswood | 700 | 170 | 530 | 2,740 | 2,420 | 320 |
| Other | 1,730 | 870 | 860 | 3.250 | 2,680 | 570 |
| Total hardwoods | 73,360 | 30,220 | 43,140 | 220,610 | 191,220 | 29,390 |
| All species | 90,750 | 35,670 | 55,080 | 272,290 | 233,710 | 38,580 |

*International ¼-inch rule.

Table 10. -- *Volume of growing stock and sawtimber on commercial forest land by species and kind of material Northern Cumberland Unit, Kentucky, 1963 -- Continued*

MORGAN COUNTY

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 3,960 | 1,070 | 2,890 | 16,350 | 12,200 | 4,150 |
| Other yellow pines | 4,740 | 2,210 | 2,530 | 13,280 | 8,140 | 5,140 |
| White pine | 480 | 150 | 330 | 1,850 | 290 | 1,560 |
| Hemlock | 950 | 450 | 500 | 2,200 | 1,580 | 620 |
| Redcedar | 10 | -- | 10 | 20 | 20 | -- |
| Total softwoods | 10,140 | 3,880 | 6,260 | 33,700 | 22,230 | 11,470 |
| Hardwoods: | | | | | | |
| Select white oak | 17,250 | 9,090 | 8,160 | 44,960 | 36,020 | 8,940 |
| Select red oak | 4,620 | 1,140 | 3,480 | 20,490 | 18,220 | 2,270 |
| Other white oak | 12,260 | 5,070 | 7,190 | 39,700 | 34,660 | 5,040 |
| Other red oak | 28,400 | 8,160 | 20,240 | 120,610 | 103,110 | 17,500 |
| Hickories | 11,180 | 6,200 | 4,980 | 28,050 | 25,010 | 3,040 |
| Yellow birch | 20 | 20 | -- | -- | -- | -- |
| Hard maple | 1,090 | 540 | 550 | 2,690 | 1,960 | 730 |
| Beech | 3,430 | 790 | 2,640 | 15,710 | 13,600 | 2,110 |
| Black walnut | 590 | 350 | 240 | 1,340 | 1,050 | 290 |
| Ash | 960 | 470 | 490 | 2,540 | 2,540 | -- |
| Soft maple | 2,040 | 1,130 | 910 | 5,270 | 4,620 | 650 |
| Sweetgum | 100 | 40 | 60 | 310 | -- | 310 |
| Blackgum | 970 | 350 | 620 | 3,790 | 3,540 | 250 |
| Cottonwood | 30 | -- | 30 | 160 | -- | 160 |
| Yellow-poplar | 11,650 | 5,340 | 6,310 | 36,310 | 29,990 | 6,320 |
| Basswood | 720 | 210 | 510 | 2,880 | 2,420 | 460 |
| Other | 2,420 | 1,660 | 760 | 4,060 | 2,490 | 1,570 |
| Total hardwoods | 97,730 | 40,560 | 57,170 | 328,870 | 279,230 | 49,640 |
| All species | 107,870 | 44,440 | 63,430 | 362,570 | 301,460 | 61,110 |

POWELL COUNTY

| | | | | | | |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Shortleaf pine | 1,360 | 230 | 1,130 | 6,490 | 4,480 | 2,010 |
| Other yellow pines | 3,610 | 1,420 | 2,190 | 10,240 | 7,230 | 3,010 |
| White pine | 440 | 90 | 350 | 1,640 | 960 | 680 |
| Hemlock | 510 | 150 | 360 | 1,350 | 790 | 560 |
| Redcedar | -- | -- | -- | -- | -- | -- |
| Total softwoods | 5,920 | 1,890 | 4,030 | 19,720 | 13,460 | 6,260 |
| Hardwoods: | | | | | | |
| Select white oak | 9,760 | 4,570 | 5,190 | 25,710 | 20,670 | 5,040 |
| Select red oak | 2,610 | 630 | 1,980 | 11,400 | 9,940 | 1,460 |
| Other white oak | 5,860 | 2,390 | 3,470 | 18,760 | 16,110 | 2,650 |
| Other red oak | 16,690 | 5,030 | 11,660 | 63,690 | 54,960 | 8,730 |
| Hickories | 6,330 | 3,260 | 3,070 | 15,140 | 13,640 | 1,500 |
| Yellow birch | 30 | 30 | -- | -- | -- | -- |
| Hard maple | 840 | 390 | 450 | 2,120 | 1,900 | 220 |
| Beech | 2,190 | 530 | 1,660 | 8,530 | 7,340 | 1,190 |
| Black walnut | 370 | 140 | 230 | 890 | 750 | 140 |
| Ash | 570 | 220 | 350 | 1,630 | 1,630 | -- |
| Soft maple | 1,000 | 520 | 480 | 2,740 | 2,470 | 270 |
| Sweetgum | 80 | 40 | 40 | 200 | 90 | 110 |
| Blackgum | 470 | 130 | 340 | 1,580 | 1,460 | 120 |
| Cottonwood | 10 | -- | 10 | 70 | -- | 70 |
| Yellow-poplar | 6,320 | 2,200 | 4,120 | 20,620 | 18,470 | 2,150 |
| Basswood | 400 | 120 | 280 | 1,210 | 950 | 260 |
| Other | 1,610 | 1,180 | 430 | 3,580 | 3,020 | 560 |
| Total hardwoods | 55,140 | 21,380 | 33,760 | 177,870 | 153,400 | 24,470 |
| All species | 61,060 | 23,270 | 37,790 | 197,590 | 166,860 | 30,730 |

*International ¼-inch rule.

Table 10. -- *Volume of growing stock and sawtimber on commercial forest land by species and kind of material Northern Cumberland Unit, Kentucky, 1963 -- Continued*

ROWAN COUNTY

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 5,770 | 1,590 | 4,180 | 20,140 | 17,610 | 2,530 |
| Other yellow pines | 7,420 | 2,970 | 4,450 | 20,060 | 14,310 | 5,750 |
| White pine | 290 | 90 | 200 | 1,150 | 310 | 840 |
| Hemlock | 610 | 430 | 180 | 970 | 590 | 380 |
| Redcedar | 60 | -- | 60 | 80 | 80 | -- |
| Total softwoods | 14,150 | 5,080 | 9,070 | 42,400 | 32,900 | 9,500 |
| Hardwoods: | | | | | | |
| Select white oak | 15,580 | 7,960 | 7,620 | 37,970 | 31,180 | 6,790 |
| Select red oak | 4,740 | 1,160 | 3,580 | 17,290 | 15,270 | 2,020 |
| Other white oak | 12,850 | 5,310 | 7,540 | 36,310 | 32,000 | 4,310 |
| Other red oak | 30,270 | 10,170 | 20,100 | 103,070 | 87,970 | 15,100 |
| Hickories | 11,700 | 5,960 | 5,740 | 26,280 | 22,750 | 3,530 |
| Yellow birch | 20 | 20 | -- | -- | -- | -- |
| Hard maple | 630 | 320 | 310 | 1,310 | 1,020 | 290 |
| Beech | 2,260 | 500 | 1,760 | 10,100 | 8,840 | 1,260 |
| Black walnut | 700 | 350 | 350 | 1,760 | 1,430 | 330 |
| Ash | 640 | 320 | 320 | 1,640 | 1,550 | 90 |
| Soft maple | 1,180 | 640 | 540 | 2,860 | 2,440 | 420 |
| Sweetgum | 380 | 80 | 300 | 1,180 | 970 | 210 |
| Blackgum | 980 | 320 | 660 | 3,490 | 3,010 | 480 |
| Cottonwood | 100 | -- | 100 | 380 | 280 | 100 |
| Yellow-poplar | 9,060 | 3,840 | 5,220 | 26,090 | 22,820 | 3,270 |
| Basswood | 500 | 140 | 360 | 1,660 | 1,260 | 400 |
| Other | 1,660 | 940 | 720 | 2,530 | 1,980 | 550 |
| Total hardwoods | 93,250 | 38,030 | 55,220 | 273,920 | 234,770 | 39,150 |
| All species | 107,400 | 43,110 | 64,290 | 316,320 | 267,670 | 48,650 |

WOLFE COUNTY

| | | | | | | |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Shortleaf pine | 4,860 | 1,330 | 3,530 | 17,220 | 14,850 | 2,370 |
| Other yellow pines | 6,380 | 2,560 | 3,820 | 18,280 | 14,790 | 3,490 |
| White pine | 4,300 | 500 | 3,800 | 13,750 | 11,860 | 1,890 |
| Hemlock | 2,600 | 450 | 2,150 | 7,540 | 6,680 | 860 |
| Redcedar | 30 | -- | 30 | 40 | 40 | -- |
| Total softwoods | 18,170 | 4,840 | 13,330 | 56,830 | 48,220 | 8,610 |
| Hardwoods: | | | | | | |
| Select white oak | 10,970 | 5,760 | 5,210 | 27,630 | 21,100 | 6,530 |
| Select red oak | 2,390 | 560 | 1,830 | 11,260 | 9,620 | 1,640 |
| Other white oak | 6,670 | 2,650 | 4,020 | 22,650 | 19,750 | 2,900 |
| Other red oak | 17,890 | 5,930 | 11,960 | 68,170 | 58,620 | 9,550 |
| Hickories | 6,790 | 3,840 | 2,950 | 16,570 | 14,080 | 2,490 |
| Yellow birch | 20 | 20 | -- | -- | -- | -- |
| Hard maple | 720 | 380 | 340 | 1,900 | 1,600 | 300 |
| Beech | 2,040 | 510 | 1,530 | 8,890 | 7,750 | 1,140 |
| Black walnut | 370 | 200 | 170 | 900 | 720 | 180 |
| Ash | 540 | 250 | 290 | 1,530 | 1,530 | -- |
| Soft maple | 1,470 | 750 | 720 | 3,510 | 3,080 | 430 |
| Sweetgum | 110 | 30 | 80 | 320 | 160 | 160 |
| Blackgum | 590 | 180 | 410 | 2,390 | 1,980 | 410 |
| Cottonwood | 20 | -- | 20 | 110 | -- | 110 |
| Yellow-poplar | 6,400 | 2,550 | 3,850 | 21,120 | 18,550 | 2,570 |
| Basswood | 350 | 100 | 250 | 1,430 | 1,120 | 310 |
| Other | 1,550 | 900 | 650 | 2,850 | 2,110 | 740 |
| Total hardwoods | 58,890 | 24,610 | 34,280 | 191,230 | 161,770 | 29,460 |
| All species | 77,060 | 29,450 | 47,610 | 248,060 | 209,990 | 38,070 |

*International ¼-inch rule.

Table 11. -- *Volume of growing stock trees on commercial forest land by species and diameter class*
*Northern Cumberland Unit, Kentucky, 1963*

(In thousand cubic feet)

| Species | All diameters | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0 and larger |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Softwoods: | | | | | | | | | | | |
| Shortleaf pine | 49,560 | 5,510 | 8,350 | 8,230 | 13,110 | 8,830 | 2,560 | 860 | 710 | 1,400 | -- |
| Other yellow pines | 70,310 | 14,270 | 15,910 | 15,060 | 12,950 | 5,970 | 4,090 | 940 | 670 | 360 | 90 |
| White pine | 8,830 | 780 | 960 | 2,460 | 560 | 430 | 770 | 1,070 | 900 | 380 | 520 |
| Hemlock | 12,950 | 1,680 | 2,420 | 700 | 1,660 | 940 | 1,120 | 1,200 | 710 | 1,070 | 1,450 |
| Redcedar | 410 | -- | -- | 410 | -- | -- | -- | -- | -- | -- | -- |
| Total softwoods | 142,060 | 22,240 | 27,640 | 26,860 | 28,280 | 16,170 | 8, 540 | 4,070 | 2,990 | 3,210 | 2,060 |
| Hardwoods: | | | | | | | | | | | |
| Select white oak | 189,390 | 20,590 | 34,980 | 42,120 | 34,040 | 27,670 | 11,000 | 9,070 | 4,140 | 2,150 | 3,630 |
| Select red oak | 47,810 | 2,110 | 3,400 | 6,100 | 7,580 | 8,740 | 5,730 | 2,340 | 3,510 | 3,260 | 5,040 |
| Other white oak | 130,070 | 14,260 | 17,310 | 20,930 | 28,710 | 19,290 | 12,610 | 7,950 | 2,540 | 1,150 | 5,320 |
| Other red oak | 307,820 | 22,750 | 29,630 | 41,000 | 49,840 | 46,700 | 41,090 | 27,900 | 18,730 | 13,030 | 17,150 |
| Hickories | 124,140 | 24,030 | 23,480 | 21,990 | 20,610 | 14,070 | 8,580 | 4,960 | 3,720 | 800 | 1,900 |
| Yellow birch | 420 | -- | -- | 380 | -- | -- | -- | 40 | -- | -- | -- |
| Hard maple | 12,260 | 2,090 | 1,750 | 2,530 | 1,820 | 2,050 | 480 | 920 | 80 | 480 | 60 |
| Beech | 37,530 | 1,640 | 4,040 | 3,970 | 4,190 | 4,470 | 3,030 | 3,900 | 2,150 | 2,440 | 7,700 |
| Black walnut | 7,540 | 1,010 | 1,590 | 1,500 | 2,240 | 1,120 | 80 | -- | -- | -- | -- |
| Ash | 10,520 | 1,160 | 2,070 | 1,790 | 1,420 | 2,170 | 1,290 | 240 | 30 | -- | 350 |
| Soft maple | 20,800 | 3,970 | 4,080 | 3,520 | 2,160 | 3,290 | 600 | 470 | 880 | 1,400 | 430 |
| Sweetgum | 1,570 | 40 | 240 | 350 | 100 | 540 | 130 | 40 | 70 | -- | 60 |
| Blackgum | 9,560 | 960 | 630 | 1,810 | 1,230 | 1,350 | 1,990 | 920 | 640 | -- | 30 |
| Cottonwood | 420 | -- | -- | -- | 380 | -- | 40 | -- | -- | -- | -- |
| Yellow-poplar | 112,660 | 18,920 | 15,920 | 14,580 | 16,820 | 15,480 | 10,520 | 10,120 | 3,990 | 4,460 | 1,850 |
| Basswood | 7,500 | 280 | 90 | 1,880 | 2,370 | 1,390 | 80 | 380 | 420 | 490 | 120 |
| Other | 26,060 | 8,210 | 4,080 | 4,970 | 2,920 | 2,440 | 1,990 | 790 | 170 | 330 | 160 |
| Total hardwoods | 1,046,070 | 122,020 | 143,290 | 169,420 | 176,430 | 150,770 | 99,240 | 70,040 | 41,070 | 29,990 | 43,800 |
| All species | 1,188,130 | 144,260 | 170,930 | 196,280 | 204,710 | 166,940 | 107,780 | 74,110 | 44,060 | 33,200 | 45,860 |

Table 12. -- *Volume of sawtimber on commercial forest land by species and diameter class*
*Northern Cumberland Unit, Kentucky, 1963*

(In thousand board feet*)

| Species | All diameters | 9.0-10.9** | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0 and larger |
|---|---|---|---|---|---|---|---|---|---|
| Softwoods: | | | | | | | | | |
| Shortleaf pine | 199,930 | 40,440 | 76,120 | 49,900 | 15,530 | 4,590 | 4,750 | 8,600 | -- |
| Other yellow pines | 208,830 | 74,810 | 68,390 | 32,370 | 21,810 | 4,410 | 4,030 | 2,690 | 320 |
| White pine | 31,320 | 11,990 | 1,910 | 1,540 | 2,720 | 5,040 | 4,910 | 1,340 | 1,870 |
| Hemlock | 34,860 | 3,500 | 6,900 | 4,020 | 4,020 | 4,160 | 2,380 | 4,720 | 5,160 |
| Redcedar | 580 | 580 | -- | -- | -- | -- | -- | -- | -- |
| Total softwoods | 475,520 | 131,320 | 153,320 | 87,830 | 44,080 | 18,200 | 16,070 | 17,350 | 7,350 |
| Hardwoods: | | | | | | | | | |
| Select white oak | 499,780 | -- | 177,130 | 152,190 | 59,630 | 52,100 | 22,390 | 12,530 | 23,810 |
| Select red oak | 213,830 | -- | 39,000 | 50,850 | 34,030 | 13,860 | 21,230 | 21,330 | 33,530 |
| Other white oak | 424,670 | -- | 142,880 | 107,360 | 71,730 | 47,170 | 16,860 | 6,420 | 32,250 |
| Other red oak | 1,256,640 | -- | 256,530 | 264,360 | 243,450 | 171,360 | 117,430 | 85,680 | 117,830 |
| Hickories | 300,730 | -- | 108,750 | 74,440 | 50,270 | 28,940 | 21,050 | 5,290 | 11,990 |
| Yellow birch | 160 | -- | -- | -- | -- | 160 | -- | -- | -- |
| Hard maple | 29,460 | -- | 8,030 | 10,880 | 2,860 | 4,950 | 330 | 2,130 | 280 |
| Beech | 161,230 | -- | 20,380 | 22,370 | 17,410 | 23,660 | 11,960 | 16,180 | 49,270 |
| Black walnut | 18,070 | -- | 11,690 | 6,090 | 290 | -- | -- | -- | -- |
| Ash | 28,670 | -- | 6,070 | 11,920 | 7,240 | 1,370 | 100 | -- | 1,970 |
| Soft maple | 52,660 | -- | 12,640 | 17,770 | 3,130 | 2,660 | 4,980 | 8,990 | 2,490 |
| Sweetgum | 4,650 | -- | 320 | 3,130 | 490 | 160 | 280 | -- | 270 |
| Blackgum | 35,660 | -- | 6,480 | 7,660 | 12,110 | 5,550 | 3,750 | -- | 110 |
| Cottonwood | 2,020 | -- | 1,860 | -- | 160 | — | -- | -- | -- |
| Yellow-poplar | 356,800 | -- | 85,430 | 84,710 | 60,750 | 60,440 | 23,790 | 28,110 | 13,570 |
| Basswood | 29,080 | -- | 12,310 | 7,880 | 310 | 2,170 | 2,480 | 3,370 | 560 |
| Other | 45,080 | -- | 12,930 | 13,290 | 10,720 | 4,750 | 630 | 1,960 | 800 |
| Total hardwoods | 3,459,190 | -- | 902,430 | 834,900 | 574,580 | 419,300 | 247,260 | 191,990 | 288,730 |
| All species | 3,934,710 | 131,320 | 1,055,750 | 922,730 | 618,660 | 437,500 | 263,330 | 209,340 | 296,080 |

*International ¼-inch rule.
**Softwoods only.

Table 13. -- *Net annual growth on commercial forest land by species and kind of material*
*Northern Cumberland Unit, Kentucky, 1963*

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 3,550 | 1,720 | 1,830 | 19,680 | 13,300 | 6,380 |
| Other yellow pines | 5,270 | 3,280 | 1,990 | 27,990 | 12,990 | 15,000 |
| White pine | 510 | 210 | 300 | 2,600 | 890 | 1,710 |
| Hemlock | 760 | 480 | 280 | 3,210 | 980 | 2,230 |
| Redcedar | 10 | -- | 10 | 110 | 110 | -- |
| Total softwoods | 10,100 | 5,690 | 4,410 | 53,590 | 28,270 | 25,320 |
| Hardwoods: | | | | | | |
| Select white oak | 8,950 | 6,570 | 2,380 | 44,640 | 22,830 | 21,810 |
| Select red oak | 2,060 | 990 | 1,070 | 12,050 | 7,980 | 4,070 |
| Other white oak | 5,630 | 3,920 | 1,710 | 26,560 | 17,490 | 9,070 |
| Other red oak | 12,850 | 7,100 | 5,750 | 69,580 | 45,050 | 24,530 |
| Hickories | 6,380 | 5,210 | 1,170 | 22,690 | 12,130 | 10,560 |
| Yellow birch | 20 | 20 | -- | 330 | 330 | -- |
| Hard maple | 650 | 490 | 160 | 2,550 | 1,170 | 1,380 |
| Beech | 1,000 | 520 | 480 | 5,180 | 2,930 | 2,250 |
| Black walnut | 520 | 390 | 130 | 2,040 | 1,370 | 670 |
| Ash | 540 | 400 | 140 | 2,310 | 1,450 | 860 |
| Soft maple | 1,340 | 1,070 | 270 | 5,210 | 3,920 | 1,290 |
| Sweetgum | 260 | 240 | 20 | 430 | -- | 430 |
| Blackgum | 530 | 400 | 130 | 2,020 | 1,510 | 510 |
| Cottonwood | 30 | -- | 30 | 240 | -- | 240 |
| Yellow-poplar | 11,150 | 7,920 | 3,230 | 38,300 | 24,640 | 13,660 |
| Basswood | 420 | 180 | 240 | 3,290 | 2,150 | 1,140 |
| Other | 1,390 | 1,270 | 120 | 4,770 | 2,490 | 2,280 |
| Total hardwoods | 53,720 | 36,690 | 17,030 | 242,190 | 147,440 | 94,750 |
| All species | 63,820 | 42,380 | 21,440 | 295,780 | 175,710 | 120,070 |

*International ¼-inch rule.

Table 14. -- *Net annual growth on commercial forest land by county and species group*
*Northern Cumberland Unit, Kentucky, 1963*

| County | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | All species | Softwoods | Hardwoods | All species | Softwoods | Hardwoods |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Boyd | 2,050 | 470 | 1,580 | 9,500 | 2,390 | 7,110 |
| Carter | 6,120 | 1,080 | 5,040 | 29,280 | 5,860 | 23,420 |
| Elliott | 4,450 | 1,140 | 3,310 | 22,170 | 6,290 | 15,880 |
| Greenup | 5,280 | 720 | 4,560 | 25,430 | 3,860 | 21,570 |
| Johnson | 4,680 | 540 | 4,140 | 22,340 | 2,800 | 19,540 |
| Lawrence | 6,590 | 840 | 5,750 | 26,600 | 4,860 | 21,740 |
| Lewis | 8,090 | 760 | 7,330 | 40,180 | 4,200 | 35,980 |
| Magoffin | 5,200 | 390 | 4,810 | 23,160 | 2,860 | 20,300 |
| Menifee | 4,110 | 1,040 | 3,070 | 18,820 | 5,250 | 13,570 |
| Morgan | 5,880 | 770 | 5,110 | 27,470 | 4,320 | 23,150 |
| Powell | 2,830 | 380 | 2,450 | 13,020 | 1,840 | 11,180 |
| Rowan | 4,660 | 950 | 3,710 | 19,890 | 4,240 | 15,650 |
| Wolfe | 3,880 | 1,020 | 2,860 | 17,920 | 4,820 | 13,100 |
| Total | 63,820 | 10,100 | 53,720 | 295,780 | 53,590 | 242,190 |

*International ¼-inch rule.

Table 15. -- *Timber cut from commercial forest land by species and kind of material*
*Northern Cumberland Unit, Kentucky, 1962*

| Species | Growing stock | | | Sawtimber |
|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** |
| Softwoods: | | | | |
| Shortleaf pine | 1,170 | 690 | 480 | 2,490 |
| Other yellow pines | 470 | 100 | 370 | 1,940 |
| White pine | 160 | 10 | 150 | 770 |
| Hemlock | 130 | 10 | 120 | 600 |
| Redcedar | 50 | 50 | -- | 20 |
| Total softwoods | 1,980 | 860 | 1,120 | 5,820 |
| Hardwoods: | | | | |
| Select white oak | 1,080 | 110 | 970 | 6,130 |
| Select red oak | 2,840 | 230 | 2,610 | 16,960 |
| Other white oak | 700 | 250 | 450 | 2,850 |
| Other red oak | 1,670 | 380 | 1,290 | 8,280 |
| Hickories | 490 | 150 | 340 | 2,210 |
| Yellow birch | -- | -- | -- | -- |
| Hard maple | 520 | 360 | 160 | 990 |
| Beech | 880 | 380 | 500 | 3,370 |
| Black walnut | 220 | 10 | 210 | 1,480 |
| Ash | 560 | 360 | 200 | 1,260 |
| Soft maple | 330 | 20 | 310 | 2,030 |
| Sweetgum | 20 | -- | 20 | 140 |
| Blackgum | 80 | -- | 80 | 510 |
| Cottonwood | 60 | 20 | 40 | 260 |
| Yellow-poplar | 3,270 | 110 | 3,160 | 21,670 |
| Basswood | 650 | 40 | 610 | 4,030 |
| Other | 380 | 70 | 310 | 2,070 |
| Total hardwoods | 13,750 | 2,490 | 11,260 | 74,240 |
| All species | 15,730 | 3,350 | 12,380 | 80,060 |

*International ¼-inch rule.

Table 16. -- *Timber cut from commercial forest land by ownership and species group*
*Northern Cumberland Unit, Kentucky, 1962*

| Ownership class | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | All species | Softwoods | Hardwoods | All species | Softwoods | Hardwoods |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| National Forest | 870 | 460 | 410 | 4,670 | 2,080 | 2,590 |
| Other public | 10 | -- | 10 | 90 | -- | 90 |
| Forest industry | 10 | -- | 10 | 30 | -- | 30 |
| Farmer and miscellaneous private | 14,840 | 1,520 | 13,320 | 75,270 | 3,740 | 71,530 |
| All ownerships | 15,730 | 1,980 | 13,750 | 80,060 | 5,820 | 74,240 |

*International ¼-inch rule.

Table 17. -- *Net annual desirable cut on commercial forest land by species and kind of material*
*Northern Cumberland Unit, Kentucky, 1963*

| Species | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | Total | Poletimber trees | Sawtimber trees | Total | In sawtimber stands | In other stands |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Softwoods: | | | | | | |
| Shortleaf pine | 1,490 | 270 | 1,220 | 7,150 | 6,480 | 670 |
| Other yellow pines | 1,150 | 380 | 770 | 3,880 | 3,000 | 880 |
| White pine | 150 | 10 | 140 | 700 | 320 | 380 |
| Hemlock | 230 | 50 | 180 | 880 | 850 | 30 |
| Redcedar | -- | -- | -- | -- | -- | -- |
| Total softwoods | 3,020 | 710 | 2,310 | 12,610 | 10,650 | 1,960 |
| Hardwoods: | | | | | | |
| Select white oak | 5,070 | 2,350 | 2,720 | 14,640 | 13,340 | 1,300 |
| Select red oak | 1,780 | 220 | 1,560 | 9,380 | 8,390 | 990 |
| Other white oak | 4,630 | 1,500 | 3,130 | 17,740 | 16,250 | 1,490 |
| Other red oak | 11,890 | 2,110 | 9,780 | 59,770 | 56,790 | 2,980 |
| Hickories | 2,970 | 1,120 | 1,850 | 10,190 | 9,520 | 670 |
| Yellow birch | 20 | 20 | -- | 10 | 10 | -- |
| Hard maple | 240 | 140 | 100 | 470 | 470 | -- |
| Beech | 1,110 | 200 | 910 | 5,380 | 5,340 | 40 |
| Black walnut | 140 | 60 | 80 | 380 | 330 | 50 |
| Ash | 400 | 140 | 260 | 1,310 | 1,310 | -- |
| Soft maple | 940 | 500 | 440 | 2,600 | 2,600 | -- |
| Sweetgum | 30 | -- | 30 | 150 | 30 | 120 |
| Blackgum | 340 | 180 | 160 | 1,040 | 1,030 | 10 |
| Cottonwood | -- | -- | -- | 10 | 10 | -- |
| Yellow-poplar | 2,140 | 550 | 1,590 | 9,690 | 9,230 | 460 |
| Basswood | 180 | 70 | 110 | 710 | 680 | 30 |
| Other | 560 | 290 | 270 | 1,330 | 1,270 | 60 |
| Total hardwoods | 32,440 | 9,450 | 22,990 | 134,800 | 126,600 | 8,200 |
| All species | 35,460 | 10,160 | 25,300 | 147,410 | 137,250 | 10,160 |

*International ¼-inch rule.

Table 18. -- *Net annual desirable cut on commercial forest land by county and species group*
*Northern Cumberland Unit, Kentucky, 1963*

| County | Growing stock | | | Sawtimber | | |
|---|---|---|---|---|---|---|
| | All species | Softwoods | Hardwoods | All species | Softwoods | Hardwoods |
| | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand cu. ft.* | *Thousand bd. ft.** | *Thousand bd. ft.** | *Thousand bd. ft.** |
| Boyd | 1,070 | 130 | 940 | 4,540 | 580 | 3,960 |
| Carter | 3,300 | 290 | 3,010 | 13,800 | 1,210 | 12,590 |
| Elliott | 2,360 | 300 | 2,060 | 10,060 | 1,250 | 8,810 |
| Greenup | 3,040 | 210 | 2,830 | 13,250 | 940 | 12,310 |
| Johnson | 2,710 | 160 | 2,550 | 11,740 | 760 | 10,980 |
| Lawrence | 2,980 | 230 | 2,750 | 10,790 | 990 | 9,800 |
| Lewis | 5,030 | 230 | 4,800 | 22,500 | 1,040 | 21,460 |
| Magoffin | 2,780 | 130 | 2,650 | 11,350 | 550 | 10,800 |
| Menifee | 2,340 | 350 | 1,990 | 9,230 | 1,310 | 7,920 |
| Morgan | 3,290 | 210 | 3,080 | 13,820 | 890 | 12,930 |
| Powell | 1,720 | 130 | 1,590 | 7,080 | 490 | 6,590 |
| Rowan | 2,670 | 280 | 2,390 | 10,380 | 1,070 | 9,310 |
| Wolfe | 2,170 | 370 | 1,800 | 8,870 | 1,530 | 7,340 |
| Total | 35,460 | 3,020 | 32,440 | 147,410 | 12,610 | 134,800 |

*International ¼-inch rule.

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